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ABSTRACT

This document consists of the four issues of "Notes on Linguistics" published during 1990. Articles in the four issues include: "The Indians Do Say Ugh-Ugh" (Howard W. Law); "Constraints of Relevance, A Key to Particle Typology" (Regina Blass); "Whatever Happened to Me? (An Objective Case Study)" (Aretta Loving); "Stop Me and Buy One (For $5...)" (Tony Naden; "Editing the Shipibo Dictionary According to Merriam Webster Style" (Dwight Day); "The Relationships Between Predicates" (Ursula Wiesemann); "Computing in Linguistics: Using Tables in Microsoft Word" (Bryan L. Harmelink); "An Appeal for Examples to Guide CADA Development" (David J. Weber); "Idiom Discovery Procedures" (Darryl Wilson); "Readable Technical Paragraphs" (Charles Peck); "A Typology of Causatives, Pragmatically Speaking" (Nancy Bishop); "Using FIESTA to Find the Context for Words in a List" (Eugene Loos, Dan Tutton); "Instead of the Cult of Personality" (Derek Bickerton); "Another Language Learning Course" (Harriet Hill); "Using Bookmarks as Cross References in Word" (Bryan Harmelink); "Computer Training at SIL Schools" (Geoffry Hunt); "Using SHOEBOX in a Linguistic Field Methods Course" (Ginger Boyd); "Primer Formatting with Microsoft Word" (Bryan Harmelink); "How to Compile and Edit a Bibliography" (Alan C. Wares); and "Researching Quote Styles" (Ursula Wiesemann). (LB)

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Notes On Linguistics

NUMBER 48 FEB 1990

CONTENTS

COOORDINATOR'S CORNER Eugene Loos 3

ARTICLES

THE INDIANS DO SAY UGH–UGH Howard W. Law 4

CONSTRAINTS ON RELEVANCE, A KEY TO PARTICLE TYPOLOGY Regina Blass 8

WHATEVER HAPPENED TO ME? (AN OBJECTIVE CASE STUDY) Aretta Loving 21

STOP ME AND BUY ONE (FOR $5...) Tony Naden 25

EDITING THE SHIPIBO DICTIONARY ACCORDING TO MERRIAM WEBSTER STYLE Dwight Day 27

THE RELATIONSHIPS BETWEEN PREDICATES Ursula Wiesemann 39

COMPUTING IN LINGUISTICS: USING TABLES IN MICROSOFT WORD Bryan L. Harmelink 41

AN APPEAL FOR EXAMPLES TO GUIDE CADA DEVELOPMENT David J. Weber 52

ANNOUNCEMENTS and REPORTS

THE 1989 LSA ANNUAL MEETING, Pete Unseth 7

A Grammar of Huallaga (Huanuco) Quechua 57

ON THE AUSTONESIAN PROJECT SYMPOSIUMCharles E. Grimes 58

REVIEWS

THE CHINESE LANGUAGE: FACT AND FANTASY, JOHN DE FRANCIS by Alan S. Kaye 60

L'ARTICULATION DU TEMPS ET DE L'ASPECT DANS LE DISCOURS TOURA, THOMAS BEARTH by Christine Miles 64

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Coordinator's Corner

Stereotypes are often not complimentary. In the minority languages of the world there may be significant usefulness in being able to show the world that peculiar linguistic traits have a reason, but finding the reason can be a matter of chance recognition as one does analysis. Howard Law's article *The Indians Do Say Ugh-Ugh* provides an example, a linguistic analysis for what is often accepted as a popular caricature.

There are a number of approaches to semantics, but until we are able to account for how speakers and hearers process speech we will not have an adequate explanation for how we get so much understanding from from so few words in an utterance. Relevance Theory is a psychological processing theory rather than a linguistic structure theory. Can it be applied to other than the analyst's own language? Regina Blass's describes what comes out when Relevance is applied to to particle analysis, one of the live issues in language typology today.

Dwight Day, with experience in professional dictionary work, in SIL undertook to publish a compilation of vernacular lexical-entries-with-glosses as something more than a word list. What does a professional dictionary project require, and even if one knew what the format was, would it be applicable for a bilingual dictionary? Dwight describes the rationale behind the features of a well known, scholarly dictionary as applied rigorously in the making of a Shipibo-Spanish bilingual dictionary.

This issue's contribution to computer applications for linguists comes from Bryan Harmelink. Bryan mentioned that in leafing through the Microsoft WORD manual he noticed the chapter on *tables* and thought immediately about *tables of content*. In checking further he realized that there were other interesting applications for this powerful feature that would make working on linguistic documents easier, faster, and more enjoyable. If you use WORD or a different processor with similar capabilities, Bryan's experience might be useful to you.

THE INDIANS DO SAY UGH-UGH!

HOWARD W. LAW

American Indians have frequently been reported in cartoons and anecdotes as saying *'Ugh*!' and *'Ugh, Ugh*!'. As depicted by the cartoonists, the typical Indian is shown as alternately using smoke signals and uttering no more than a couple of grunts usually represented as *'Ugh'*, either singly or repeated a couple of times. This characterization is probably not taken seriously by any but the most naive, nor is it believed to represent adequately any American Indian speech even as an isolated utterance; it certainly doesn't represent any Indian's total vocabulary.

Where did such a representation come from, then? Since some Indians do say something like *'Ugh, Ugh!'*, i.e. phonetically [*g...g*], but phonemically [*ag...ag*], is it possible that the early white settlers in some part of the United States heard Indians using what seemed to them very strange speech and reacted to it as consisting of predominantly a series of *'ugh's*? Examples from Southwestern Chippewa of Minnesota[1] (an Algonkin language) might suggest this. Note the following utterance (All words are stressed on the final syllable.):

> *niswi miskoziwag ni z makade wiziwag, mida swi ozawiwag, mi nawa be zigwa biskizi e ya wagwag.*
>
> I have three red horses, two black ones, ten brown ones and one white one.

The sequence *-ag* occurs four times and the sequence *-a g* once. The auditory impression to a foreigner could easily be *'Ugh-Ugh'*.

Animate nouns in Chippewa are marked for gender and number; one of the allomorphs of the animate plural suffix is *-ag* as seen in the following examples:

animos (-ag)	**dog**	*nika (-g)*	**goose**
zingos (-ag)	*weasel*	*ga g (-wag)*	**porcupine**
wa gos (-ag)	**fox**	*ikwe (-wag)*	**woman**
gi go (-yag)	**fish**		

The suffix *-ag* also occurs in certain animate interrogative pronouns also marking plural number:

awe ne n who? (sing.) *awe ne nag* who? (pl.):

Verbs with a transitive object agree with their object as to gender and number:

nindaya wa g animosag	I have (some) dogs.
nindaya nan aniti n	I have (some) spears.

Further agreement is found between the interrogative pronouns and the demonstrative pronouns as seen in the following:

awe ne nag ongo?	Who/what are these [anim.]?
awe ne nag ingiw?	Who/what are those [anim.]?

In addition to the allomorphs of the animate plural seen in the above examples (*-ag, -g, -yag, -wag*) the following allomorphs of the plural animate suffix also occur in Chippewa: *-o g, -i g, -jig* plus a couple of less frequent ones. However, *-ag* is by far the more common of these allomorphs in running speech.

Since *-ag* is the most frequent allomorph of the animate plural morpheme and since the animate gender occurs frequently in Chippewa speech, it is not surprising that the sequence -ag would impress foreign listeners and that they would characterize the speech of these people by that frequent sequence of sounds.

In addition, the same sequence of sounds, but with a different grammatical function, has already been seen in a couple of verbs in previous illustrations. The form *-ag* also occurs in intransitive verbs as seen in the following examples:

wisiniwag	**They are eating.**	*abiwag*	**They are at home.**
aye hoziwag	**They are tired.**	*anoki wag*	**They are working.**
bimose wag	**They are walking.**	*aya wag*	**They are. They exist.**
bapiwag	**They are laughing.**	*bindige wag*	**They are entering.**
a koziwag	**They are sick.**	*gi we wag*	**They are returning.**
gitimiwag	**They are lazy.**	*namadabiwag*	**They are sitting.**
bimibatowag	**They are running.**		

The relatively high frequency of *-ag* single or repeated two or more times in a single utterance is seen in the following constructions elicited from Chippewa speakers under various circumstance:

What do you have?
I have some dogs.
What are those?
Those are white men.
All I have are some cows.
Are they cows?
Those are not cows.
Do you have cows?

Sequences of the form *-ag* occurring repeatedly is also illustrated in a continuous narrative text where *-ag* occurs twenty-four times in twelve utterances.

I have three red horses, two black ones, ten brown ones and one white one.
Big black ones?
Yes, all I have are big horses.
Too bad! I wish I had small horses.
I have small horses.
What color are they?
One white, two yellow and eight red.
Yes, I have five black horses. I'm not selling my little horses.
Why?
Because my wife wants them.

The high frequency of the form *-ag* in texts and in conversations of this sort which must have been heard by early white men contacting the Algonkin Indians would certainly have given an impression of the Indians saying '*Ugh, Ugh*!' since this form occurs in similar texts more than any other syllable or sequence of sounds.

Though it may not be possible to make the historical connection explaining '*Ugh, Ugh*!' as related to the animate plural morph -ag, and certainly it is impossible to prove any such connection now, nonetheless it is an interesting conjecture. Furthermore, the conjecture seems to have a parallel in at least one other culture. William Samarin reports in his **The Gbeya Language** (University of California Press, 1967, p. 2) that the Gbeya people of the Central African Republic have a highly recurrent form in their language of the form 'go' which means 'and then' used in narrative style when relating a series of events. Non-Gbeya speakers apparently having heard this highly recurrent sequence refer to the Gbeya speakers as 'Gbeya-go-go people', the vowel change being consistent with their own phonologic system.

In any event, one Chippewa informant working with the author did say while producing animate noun plurals in response to the linguist's questioning: Well, we do say '*Ugh, Ugh*!' don't we!" ■

[1]The data and ideas for this previously unpublished paper resulted from the author's involvement in a Chippewa language project as part of the

development of the American Indian Studies Department at the University of Minnesota in 1969-70. Specific contributions to this presentation were made by Mr. Gilles Delisle and Mrs. Ross Foss.

* * * * * * * * * * * * *

The LSA Annual Meeting
Washington, D.C., Dec. 27-Dec 30, 1989.

There were 210 papers given, including 2 by two SIL members: The *Syntax of Applicatives in Tepehua (Totonacan)* by Jim Watters, Mexico, and *A Cluster of Typological Surprises* in Majang by myself. *On the Indirect Relationship Between Horn Scales and Suspension Frames* was given by Yo Matsumoto who has taught at SIL Japan . There were at least four other SIL members attending the meeting.

Most of the papers were on Syntax or Phonology. It appears that the GB framework was somewhat prominent. In the phonology sections, non-linear phonology was absolutely dominant, though it has a number of forms. Other areas of strong interest (judging by the number of papers) included Semantics (widely defined) and Discourse Analysis, which is being practiced in a VERY wide, diverse number of forms. There were a number of papers on obscure or unknown languages, so a paper by an SIL field member about his or her language would not be out of place.

The presentations were often weak. I was appalled that so many of those presenting papers communicated their ideas so poorly; no handouts, insufficent examples, poor speaking techniques, etc.

On the positive side, some papers gave unexpected help. I was surprised when a paper on Old Japanese gave me a helpful hint for a problem in Majang.

There was much to be learned at the conference outside the formal sessions, talking with people working on related languages or problems, and the book exhibition was very and helpful to a person like me, who is always so far from an academic bookstore. I also had a good talk with the editor of LANGUAGE.

Pete Unseth

Constraints on Relevance
a key to particle typology

REGINA BLASS

1. Introduction.

When considered as surface textual connectives, different particles often seem to mark the same relation. Consider *(1)* and *(2)*:

(1) Karen became a translator **because** she is a Christian.

(2) Karen became a translator: **after all**, she is good at linguistics.

It could be said that in both cases the event described in the first clause is a result or consequence of what is described in the second, yet intuitively **because** and **after all** do not mean the same.

On the other hand some particles have been analyzed as having a number of different 'senses'; as for instance **auch** 'also' in German, as in *(3)* and *(4)*.

(3) *Klaus hat ein AUTO* *und auch ein BOOT.*
'Klaus has a **CAR** and also a **BOAT**.'

(4) *a.* *Katharina Witt ist eine außerordentlich gute Eiskunstläuferin.*
'Katharina Witt is an exceptionally good ice skater.'

b. *Ist sie auch.*
(Lit.: Is she also)
'Indeed she is.'

Yet linguists who have worked on these German particles (Franck (1980), Weydt (1979), (1983)) are not really satisfied with a solution in terms of homonymy or ambiguity.

Lately Sperber and Wilson (1986) have shown that the way an utterance is processed may have a direct effect on its pragmatic interpretation, and Blakemore (1986) has argued that in English there is a group of particles, whose function is to guide and constrain the way an utterance is processed. Some of these particles guide the inferential processing of an utterance, whereas others affect its non-inferential processing.

I shall argue that with the help of Sperber and Wilson's and Blakemore's theory, it is possible to explain the difference in meaning between **because** in *(1)* and **after all** in *(2)*, and to establish a fundamental similarity between all the uses of auch 'also' in German, thus increasing our understanding of the role of particles in a language.

Since the use of these particles is psychologically motivated, and is not fully determined by social or cultural factors as assumed by some linguists, similar phenomena may be found in diverse languages, i.e. particular processing 'tasks' may by reflected in the semantic content of particles in quite unrelated languages. I shall argue that identifying the particular roles of particles in processing is the key to an explanatory typology of particles.

2. Constraints on relevance.

Looking at the text in isolation, in both *(1)* and *(2)* the 'connecting' particles may be said to introduce a clause which describes a reason for or cause of, Karen's becoming a translator.

In fact, there are two slightly different ways in which *(1)* can be understood, usually distinguished by the presence or absence of a pause or comma.[1] One is that the speaker is communicating a single fact - that Karen became a translator because she is a Christian. The other is that the speaker is communicating two separate facts: that Karen became a translator, and that she did so because she is a Christian. It seems clear that in both interpretations, **because** makes a contribution to the content (i.e. the truth conditions) of the propositions expressed.

What about *(2)*? There is no possibility of two interpretations, as there was for *(1)*. *(2)* expresses at least two facts: first that Karen became a translator, and second, that she is good at linguistics. In neither of these does **after all** appear. What, then, is the role of **after all** in *(2)*?

Could **after all** in *(2)* be replaced by **because**? Indeed it could. Consider *(5)*:

(5) Karen became a translator, **because** she is good at linguistics.

However, *(5)* would not mean quite the same as *(2)*: it would communicate, first, that Karen became a translator, and second, that she did so because she is good at linguistics.

Would it be possible to replace **because** in *(1)* with **after all**? Consider *(6)*:

(6) ? Karen became a translator, **after all** she is a Christian.

While there may be specific contexts in which *(6)* might sound right, in many contexts *(6)* would sound very odd. How can we account for the oddity which the use of one particle seems to create and the other does not?

To answer this question let me introduce a particular aspect of relevance theory which was mainly developed by Blakemore (1986). According to Sperber and Wilson (1986) all utterance interpretation is constrained by the search for optimal relevance. This means that hearers look for an interpretation which the speaker might have expected to yield adequate contextual effects for the minimum possible processing effort. Speakers aiming at optimal relevance will try to spare their hearers any unnecessary processing effort. As a result, the speaker who has a specific interpretation in mind will use every possible means to guide the hearer towards it making sure, for example, that the intended set of contextual assumptions is immediately accessible to the hearer, and that the intended inferences will come immediately to the hearer's mind.

Blakemore argues that speakers also have available a range of LINGUISTIC devices for guiding the hearer towards the intended context and inferences. Expressions like **after all**, **so** and **therefore**, which she deals with in her thesis, fall into this category. These particles do not make any contribution to the content -i.e. truth conditions- of the propositions expressed; their sole function is to minimize the hearer's processing effort by indicating the intended context in which these propositions are to be processed, or the intended inferences to be drawn from them.

3. Inferential connections

Now let us go back to *(2)* and consider exactly how it might be processed. Blakemore argues that by using **after all**, the speaker instructs the hearer to establish a certain type of inferential

relationship between the second proposition **'she is good at linguistics'** and the first proposition **'Karen became a translator'**. Roughly the second proposition should be treated as a premise in an argument by which the first proposition is to be derived. Of course, to establish this conclusion other premises drawn from the context, will be needed. Here, they might be something like the following:

(2') *a.* Karen was an SIL student.
b. SIL students who are good at linguistics become translators.

Using these premises, plus the stated premise that Karen is good at linguistics, the conclusion that Karen became a translator can be derived. The role of **after all**, then, is to indicate that the speaker expects the utterance to be processed in just this way, with the information given in the second clause providing evidence for, or an explanation of, the information given in the first.

Could we do the same with *(1)*? No, the hearer of *(1)* is not instructed to use the second clause as evidence for, or an explanation of, the first. For one thing, the argument would require premises such as **'all Christians become translators'**, or **'Christians normally become translators'**-which would wrongly imply that Billy Graham and the Archbishop of Canterbury are in the wrong job. So the difference between *(1)* and *(2)* might be summed up as follows: *(1)* explicitly states a causal relation between two facts; *(2)* implies an inferential relation between two propositions. And their differences are attributable to a difference in meaning between **because** and **after all**.

According to the analysis just outlined the first clause of (2) is actually a contextual implication of the second, and the conclusion of the implied argument is introduced before the premise. Why should one introduce a conclusion before introducing its premise? Blakemore argues there is a particular reason for doing this: it is to strengthen the conclusion, i.e. to provide further evidence for the statement **'Karen became a translator'**.

Now let us see how other inferential constraints on relevance work. Consider the following example with **so**.

(7) Karen is good at linguistics
so she became a translator.

Blakemore shows that **so**, like **after all**, leads the hearer to establish an inferential connection between the first and second clause.[2] In fact, the background assumptions and the conclusion are the same for *(7)* as for *(2)*. However, if we look at *(7)* we realize that in this case the conclusion of the argument comes after the premise. That is, in *(7)* the evidence is given first, and then the conclusion is drawn, whereas in *(2)*, the conclusion is first stated, and then supported with further evidence.

Sometimes, only the conclusion is explicitly expressed. Consider *(8)* [Background: I tell my flatmate at six o'clock that I have to work in the evening, and cannot watch TV. At eight o'clock she sees me sitting in front of the TV and says:]

(8) So you've finished your work.

Here, the evidence is left implicit, to be supplied by the hearer as part of the context. In either case, the role of **so** is the same: to guide the hearer to a certain type of inferential processing.

Of course these particles are optional. It is quite possible to have just two propositions explicitly expressed, so that the hearer is left to decide for himself what relation he was expected to establish. On the other hand, this may be a risky task for the hearer: different interpretation possibilities may lead to the wrong interpretation in such cases; the particles, which make these inferential relations explicit, clearly facilitate processing. Beside that, they reveal what the speaker takes to be shared assumptions between speaker and hearer. In example *(2)* the speaker takes for granted that the hearer will be able to supply the missing premises *(2'a)* and *(2'b)*, which are needed to establish the required inferential relationship. Moreover, he takes for granted that the hearer agrees with him that Karen is good at linguistics. The second clause of *(2)* thus functions largely as a reminder, which in turn makes accessible *(2'a)* and *(2'b)*, which are used to strengthen the conclusion that has already been stated.

This leads us to the reasons for which communication is undertaken. No proper communication has taken place unless the hearer's set of accessible assumptions has been modified. Modification of existing assumptions can be achieved through contextual implication, but it may also be achieved in other ways. Assumptions may be more or less strongly held, more or less evidenced. Some propositions are

communicated merely to strengthen existing assumptions. In constructions with **after all**, the second clause is meant primarily to strengthen the assumption which has already been stated in the first clause.

Another way in which existing assumptions may be modified is by contradiction, which may lead to the erasure of assumptions in memory. Particles may also play a role in this type of processing, but assumption erasure is beyond the present paper.

4. Non-inferential constraints on relevance.

So far the constraints on relevance we have looked at have had to do with inferential processing. However, not all particles constrain inferential processing. **Also** in English establishes a non-inferential constraint on relevance-in that the two propositions it unites are not premise and conclusion.

Consider *(9)* and *(10)*:

(9) Karen likes LINGUISTICS
and also ANTHROPOLOGY.

(10) BILL has a computer.
Susan ALSO has one.

The above use of ***also*** has traditionally been referred to as the adverbial or conjunctive use. Some linguists (Green (1973)) have wondered whether **also** is not simply a form of **and**. The question would have to be asked in that case why ***also*** is necessary in addition to **and** in *(9)*. I want to show that **also** is not equivalent to **and**. **Also** guides the hearer to establish what I shall call (following Blakemore) an ADDITIONAL relation between the two conjuncts. The reason why **also** is used in sentential sequences as in *(10)* is to make sure that the utterances are understood as standing in this additional relation, since a conjunction or S/S-sequence may also be in a temporal, causal or contrastive relation.

ADDITION is to be understood as one more proposition or property being added to another proposition or property in an identical or similar context. **Also** may have only part of the proposition in its scope, and thus relate properties rather than propositions, as in *(9)* and *(10)*; or it may have the whole proposition in its scope, and thus relate propositions, as in *(11)*.

(11) *a.* It is good to visit West-Africa during the dry season.
b. The roads are passable.
c. Also, then there are almost no mosquitos.

The main function of also in *(11)* is to establish an addition relation between *(11b)* and *(11c)*. The effect is that their propositions will be processed in the same or similar contexts, and consequently yield the same or similar conclusions. The conclusion in this case, of course, is the proposition expressed in *(11a)*. The additional contextual assumptions needed to establish this conclusion are *(11°a)* and *(11°b)* respectively:

(11°)

a. If the roads are passable
then it is good to travel to West-Africa.
b. If there are almost no mosquitos
then it is good to travel to West-Africa.

Hence **also** indicates to the hearer that the propositions it links are to be treated as premises in parallel arguments, with parallel conclusions.

Notice that it would not be possible in English to take just one of the two parallel premises and mark it with **also**. The utterance in *(12)* is unacceptable:

(11) *a.* It is good to travel to West Africa during the dry season.

(12) *Then the roads are also passable.

On hearing *(12)* the English-speaking listener would assume an implicit parallel conjunct, otherwise it is ill-formed. However, in German **auch** is grammatical in these constructions without assuming a parallel conjunct. Consider *(13)*:

(13) *a.* *Es ist gut, Westafrika während der Trockenzeit zu besuchen.*
b. *Dann sind **auch** die Straßen befahrbar.*

Looking at more data, we can see that although **auch** is used in German in a similar way to English **also**, as in *(14)*, it may replace a host of other particles in English as in *(15)* to *(17)*:

(14) *a.* *Karin ist gut in LINGUISTIK*
*und **auch** in ANTHROPOLOGIE.*

'Karin is good in LINGUISTICS
and **also** in ANTHROPOLOGY.

(15) a. *Karin ist Übersetzerin geworden.*
'Karin has become a translator.'
b. *Sie ist* ***ja auch*** *gut in Linguistik.*
'**After all**, she is good in Linguistics.'

(16) a. *Es ist gut, daß Karin Übersetzerin geworden geworden ist.*
'It is good that Karin has become a translator.'
b. *Ist es* ***auch****.*
(Lit.: Is it also.)
'**Indeed** it is.'

(17) *Karin löst jede Aufgabe,*
auch *die schwereste.*
'Karin solves every problem,
even the most difficult.

In *(14)*-as in the English examples with **also**-there is a parallel relation of addition involved; but, in *(15)* to *(18)* the utterances which include **auch** express propositions whose function it is to strengthen or confirm the preceding proposition.

In *(15)* we find a similar case to *(2)* in English, and as in *(2)* the hearer is instructed to make an inferential connection of the same sort as *(2')*.

(15) contains not only **auch** but also **ja** 'yes'. **Ja** in this case indicates to the hearer that the assumption to be accessed from the context is known to the hearer, and the utterance is therefore a reminder.

In *(16)* the strengthening proposition is identical to the proposition to be strengthened. The relevance of *(16b)* is to confirm what *(16a)* said.

In *(17)* the proposition with **auch** is designed to underline how good Karin is at solving problems. In English the particle **even** is used, which is used to indicate extreme points on a scale.

Thus, in each of the cases where German **auch** cannot be translated with **also**, the proposition in which it occurs is designed to affect the strength of another proposition. Just as in the 'parallel' cases, there is an ADDITION involved, though one that is different from the parallel use. We could therefore say that the function of **auch** in German, as

in English, is to encourage the hearer to establish a relation of ADDITION.

It is understandable that languages like English and French use **also** only for parallel and not for confirmatory adding. The two types of addition are clearly different, though they have much in common. But it is also understandable that languages like German should use a single particle for both types of adding-since they have much in common. In fact, within relevance theory, they are merely two different ways of establishing relevance: by contextual implication in the first case, and by strengthening (confirmation) in the second.

5. Semantic constraints on relevance and particle typology.

Having established the hypothesis that particles are guides to processing, and that their processing 'tasks' determine their semantic content, it is really not surprising to find similar uses of particles in completely unrelated languages. The following three examples taken from Sissala, a Niger-Congo, Gur, language, show that the German example of additional use is not an idiosyncratic case. Consider *(18)*, *(19)*, *(20)*, and *(21)*.

(18) *A* *mʊ́ré* *mʊ́mʊ́ré* *ré* *a* *pʊ́ŋsémá.*
we **told** **stories** **IM** **and** **written** **also**
'We have told stories and also written.'

(19) *a.* *Zimpaalé* *Kiele* *bio* *ní*
Zimpaale **Dagaati** **child** **is**
'Zimpaale is a Dagaati.'

b. *Má ŋ* *ɔɔ* *rí* *yá*
also **I** **know-him** **IM** **PT**
'Indeed (he is), I know him.'

(20) *a.* *Lí gbé,* *ùù* *kó* *rù* *sʊl* *rá* *né*
perhaps, **he-IPF** **come** **that-he** **ask** **us** **EM**
'Perhaps, he is coming to ask us.'

b. *má ʊ* *die* *má* *kúó*
also **he** **yesterday** **also** **come**

ríráfa *pa* *cɛrɛ* *ná*
that-we **should** **collect** **wood** **the**

'After all, he came yesterday also
to ask us to collect wood for him.'

(21) *a.* *Uv de* *ná* *moŋgo* *a* *de* *dí dí*
If-he **F** **see** **mango** **and** **F** **eat** **ea**
t
'If he sees mangoes, he eats and eats.'

U wad já *rú* *ta.*
he not-IPF **want** **that-he** **stop.**
'He doesn't want to stop.'

b. *Mvɔ́* *nyɛ* *má*
little **like-that** **also**
'(Not) even for a little while.'

(18) is a typical case of parallel adding-as in English **also**-while *(19)*. *(20)* and *(21)* are cases of adding by strengthening. In *(19)* the proposition to be confirmed is not identical to the one prefaced with **má**, which nonetheless provides independent evidence for it. B's answer in *(19)* is relevant in a context containing *(19˚)*:

(19˚) If one knows somebody well,
one is able to identify him.

The speaker expects the hearer to access this background assumption and then combine it with the premise of B's utterance *(19˚a)* to derive a contextual implication *(19˚b)*:

(19˚) *a.***Premise:** B. knows Zimpaale

(19˚) *b.***Conclusion:** B. can identify Zimpaale

The contextual implication, which is the conclusion of this deduction, confirms A's statement.

In *(20)* the initial **má** instructs the hearer to establish an additional relation, in this case by using *(20b)* as a premise to strengthen *(20a)*. The extra assumptions which the hearer is supposed to supply are something like *(20˚)*:

(20˚) If somebody came yesterday with a certain intention then it is likely that he will come the second time with the same intention.

> If he came yesterday in order to ask us for help, then he will come today in order to ask for help.

Against this context, which the speaker assumes the hearer to have accessible the proposition expressed by *(20b)* gives rise to a contextual implication which is already expressed in *(20a)* in the text. This case is very similar to *(2)* in English and *(15)* in German.

In *(21)* B's utterance is meant to strengthen A's claim that X does not want to stop eatir ; mangoes-and all the contextual effects of this claim-by emphasizing that X does not want to stop eating even for a little time, i.e. by spelling out and confirming the import of this claim. The contextual implication is *(21')*:

(21') X's liking for mangoes is extreme.

B strengthens this contextual implication by showing just how great is X's liking of mangoes, 'not being able to stop eating for a little'. This additional premise makes B's utterance relevant and strengthens A's opinion that X's liking for mangoes is extreme.

This example could be translated into German and **auch** would be used, but it could not be translated into English with **also**. The ungrammaticality of **also** in English is predicted by the fact that **also** is only used in English for parallel adding, and not for adding strength to an existing assumption.

The above examples are only a small sample of the variety of uses of **má** 'also' in Sissala. However, they suffice to show that semantic constraints on relevance may be found with a very similar range of uses in unrelated languages. Similar uses to **má** and **auch** have also been found in Serbo Croat and Hungarian, although the full range of German and Sissala uses is not covered.

Addition viewed not only in the parallel way according to Blakemore, but in a wider sense (see also Blass, Ph.D. thesis) is a very important principle in language, and a lot of hitherto unexplained particles may well be explainable in these terms. It is further to be expected that languages use particles to establish inferential relations, as **after all** and **so** do in English, or shared assumptions as in the case of **ja** in German and **after all** in English, or in terms of their scalar content as **even** does. **Even** really contains **also** and has in addition an interpretation of extremeness. It is therefore not surprising that many

languages do not have ONE particle which covers the semantic content of **even**, but use **also** and express the notion of extremeness either with another particle as in Sissala or by some other means. Some languages use **auch** instead of **even** in cases where the utterance itself expresses the scalarity. This is the case in German.

6. Conclusion.

The purpose of this article has been to explain the function of a particular group of particles, which do not make any contribution to the meaning (i.e. truth conditions) of the sentence uttered, but which guide and facilitate the hearer's processing-semantic constraints on relevance.

I have tried to show that the difference in form of the particles is due to a difference in processing function. Examples from German and Sissala revealed that unrelated languages may establish similar processing goals. The result of this still limited research has shown that taking processing goals into account, a typology of particle use may be established.

It is to be expected that variation is found in languages' choice of how to correlate processing goals with form. While some languages may choose to represent inferential processing, others may choose to represent addition, and others may do both. However, it is to be expected that similar patterns of particle use may be found universally, due to the fact that humans have the same cognitive abilities and are constrained by one general communicative principle, the principle of relevance.

Comparative work in this area in a number of languages could be a very rewarding task and might shed further light in the linguistic devices that humans use to guide the hearer's processing, besides providing an aid for the language learner and field linguist.

Acknowledgements

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Notes

[1]In fact there are other uses of *because*, including so-called adsentential uses, or 'speech-act' uses.

[2]There are also non-inferential uses of *so*, (see Blakemore (1986)).

References

Blakemore, Diane. 1986. *Semantic constraints on relevance.* **University of London Ph.D. thesis. Basil Blackwell.**

Blass, Regina. forthcoming. *Discourse connectivity and constraints on relevance in Sissala.* **University of London Ph.D. Thesis.**

– – – –. 1987. 'Confirmation and particle typology'. Paper presented at the XIVth International Congress of Linguists in East Berlin.

– – – –. 1986. 'Cohesion, Coherence and Relevance'. Paper presented at the meeting of the Linguistics Association of Great Britain in Norwich. *Notes on Linguistics* **34.**

– – – –. 1986. 'Ma (Sissala) and auch (German)-a rendezvous between focus and confirmation'. Paper presented at the Autumn meeting of the Linguistics Association of Great Britain in Edinburgh.

Franck, Dorothea. 1980. Grammatick und Konversation. Scriptor Verlag, Königstein/Ts.

Green, G. M. 1973. 'The lexical expression of emphatic conjunction. Theoretical implications'. In *Foundations of Language* **10.**

Karttunen, L. and Peters, S. 1979. 'Conventional implicature', in Choon-Kyu Oh, David A Dinneen (eds.) *Syntax and semantics 11 presupposition.* **Academic Press.**

Kempson, Ruth M. 1975. *Presupposition and delimitation of semantics.* **Cambridge University Press.**

König, Ekkehard. 1977. 'Modalpartikeln in Fragesätzen', in Weydt, H. (ed.) *Aspekte der Modalpartikeln.* **Niemeyer, Tübingen.**

Sperber, Dan and Wilson, Deirdre. 1986. *Relevance: Communication and cognition.* **Basil Blackwell and Harvard UP.**

Weydt, H. (ed.). 1983. *Partikeln und Interaktion.* **Niemeyer, Tübingen.**

– – – – (ed.). 1979. *Die Partikeln der deutschen Sprache.* **Berlin: de Gruyter.**

– – – – (ed.). 1977. *Aspekte der Modalpartikeln.* **Studien zur deutschen Abtönung, Niemeyer, Tübingen.**

Wilson, Deirdre. 1975. *Presuppositionens and non-truth-conditional semantics.* **London: Academic Press.**

Whatever Happened to Me?
(An Objective Case Study)

or

The Groanings of a Grammarian

BY ARETTA LOVING

Tom Wolfe, seeking to capture the extreme self-centeredness of the 1970s, coined "the me decade" to describe that era. I don't claim to be a Wolfe. Neither am I attempting to mint a coin of speech to describe this waning decade. But, here I present an objective case study, pointing out that in this decade we are in danger of loosing *me*--also *us*, *him*, *her* and *them*. These *objective* case pronouns have become an endangered species!

In the 1970s, when our two daughters were in primary school, a frequent topic of conversation at our evening meal was *me*.

(Oh, my! Grammatically should I say, "...was I?" No, not here, but "was me" sounds so wrong.) The conversation might go something like this:

"Daddy, you know we aren't allowed to go barefooted at school. Well, today Debbie and me tied strings around our ankles, then threaded them between our toes and tied flowers to the strings--to make it look like we had on sandals. None of the teachers said anything to us..." This last reported with a smug "we really pulled the wool over their eyes" tone of voice : then, in a more subdued "Or did we?" tone, "Maybe they didn't even notice what Debbie and me..."

"Karen!" Dad would interrupt, "*I, you, he/she/it*--the nominative case, singular pronouns: *we, you, they*--the plurals--are used as the subject of a sentence! Debbie and *I* and tied strings around our ankles... Maybe they didn't even notice what Debbie and *I* did."

The objective case pronouns were next in the lecture: "*Me, you, him/her/it*--singular: *us, you, them*--plural--used as direct and indirect objects and as object of a preposition." Often before he got that far, one of the girls would counter with, "You tied strings around your

ankles today too, Daddy?" Then, imagining gangly Dad with strings around his bony ankles and flowers between his stringy toes, we'd all dissolve into giggles.

These stimulating (not always academically stimulating) conversations continued well after Karen and Treesa--tell it not in Gath!--were in high school. Sometimes one of the girls, the one who was the target of the lecture, was in no mood for a grammar lesson. I'd plead with my husband to "Lay off, they'll eventually learn to say 'Debbie and I.'" How right I was! In a recent letter, Karen, with a master's degree from a well known Southern university, reported that someone "gave Lyle and I..." Ah well, at least her degree isn't in English.

Today's generation should have no problem learning to say "Debbie and I," "he and I," "she and I", and so on--but alas, I predict they will have trouble learning to say "Debbie and me," "him and me," "her and me." Some English speakers feel so uncomfortable with *me* that they replace *me* with the reflexive pronoun *myself*. A high school principal handed out forms for students to fill in and asked them to "return to myself." Grammarian Robert Gula (1981) reminds us, "Myself is not a polite way of referring to yourself. Say *to me*, not *to myself*."

In today's usage of our English language--even the written--examples abound demonstrating that the turf of the objective case pronouns is being challenged. An author of a recent psychology book penned, "He told my wife and I..." A newsletter distributed by an organization whose members pride themselves on being intellectual contained a sentence that ended "...for you and I." A popular Christian magazine reported, "God miraculously delivered he and his family..." A brochure sent out with a Christmas song tape ended with, "May the testimony of He who has come, be in your hearts this season." A well-known digest with an international distribution allowed "for we octogenarians" to appear in print. (Maybe the editors of these pieces also had parents who lectured on the evils of saying "Debbie and me.")

An article in a newspaper published in a major California city contained the phrase, between Sharon and I. "Between you and I" is often used by people of all levels of education. Morton S. Freeman (1983) says: "...in the minds of some people, *me* is too emphatic and too egotistical, whereas *I*, when combined with a noun or another

pronoun, sounds softer: 'It was just between you and I.' *I*, however, is grammatically indefensible ... To the untutored mind *between you and I* has to be correct because it sounds as though it ought to be."

Spoken English, even in the media, also abounds with examples of this objective case aversion. Last fall a T.V. sports commentator announced: "Sports is a big thing in the eyes of we Americans." And **The Thorn Bird** television series had Father Ralph saying, "...among we red robed vultures."

Evans (1969) reminded us that "Our language is changing all the time." And though he was speaking of change in meaning of words, some of his statements are applicable to our feelings about grammatical change in our language. He says, "...language experts...feel that if influential people would only refuse to 'permit' this process, it would stop right now. Alas, the tendencies they deplore have been evident for as long a we have any record of language and cannot be stayed or hastened by any individual ... the forces that cause the changes are complex and deep-rooted--and as indifferent to our indignation or approval as the tides of the ocean."

Sapir (1921), speaking of grammatical changes in our language as "drift," would be horrified if he were alive today. "Surely the distinction between subjective [nominative] *I* and objective *me*, between subjective *he* and objective *him* ... belongs at the very core of the [English] language ... to level *I* and *me* to a single case--would that not be to un-English our language beyond recognition? There is no drift toward such horrors as...I see he." (Sorry, Sapir, people of today **are** saying, "I saw he and Jane.") Sapir continues, "True, the phonetic disparity between *I* and *me*, *he* and *him*, *we* and *us*, has been too great for any serious possibility of form leveling." But today, almost 70 years after that was written, we can't help but say, "Oh yeah? The ground is becoming more level everyday!"

Recently a pastor, a man with a Ph.D. enthusiastically exclaimed, "How very much God loves you and I!" (On that one I almost felt irreverent as I scrunched down in my seat and groaned.)

Well, you know, I imagine God isn't too concerned about the objective versus the nominative case, or even if we get "reflexive" and say, "Give it to myself." He probably accepts that the English language is going through change in that area, and that it's a fact of

life. Like *can* and *may* did, for example. Most speakers of the English dialect, even those my age, no longer insist on a distinction between *can* and *may*. Freeman (1983) backs us, allowing us to relax here. He says, "In current usage *can* frequently serves for both permission and ability." Ah, but there was no relaxing with the usage of *can* and *may* for our parents. Separation of these two words was drilled into them and they, in turn were obligated to drill it into their students. My mother-in-law, a teacher, heard someone standing by her desk asking, "Can Johnny come down to my office?" Without raising her head she instinctively replied, "Johnny *may* go down to your office!" She then looked up into the eyes of the school principal. That was over thirty years ago.

Today even most of we "purists", even including my mother-in-law and I, are not bothered by the loss of the *can-may* dichotomy. But perhaps you, along with my husband and I, are asking "Whatever happened to me?"

Reader, did you notice those last two sentences? If you saw nothing wrong with them, you can congratulate yourself (yes, that is correct usage of *yourself*) on having completely adapted to the language transition which is taking place with *me* and *us*. (Or to you, should I say "taking place with *I* and *we*?") If you were aware that the sentences used *we* and *I* incorrectly, but didn't gasp and hit yourself on the forehead with an open hand while exclaiming, Oh, no! Even someone claiming to be a grammarian who is lamenting the demise of *me*..." then I'd say you are well on your way to accepting the change.

Some of you, I predict, will read this article and comment, "Hmmm! Interesting!" as you yawn and lay it aside. You have more important things to worry about and couldn't care less about the nominative versus objective case, much less reflexive pronouns. You're blessed: one less thing in life to frustrate you. Others, maybe those whose parents pedantically lectured them as we did ours, will exclaim, "Hey! she's right. We are in danger of loosing *me*!" And a third category will toss this article aside with the comment, "What's bugging she anyway?" And that reminds me--though it has nothing (Cont'd p.51)

Stop Me and Buy One (for $5...)

TONY NADEN

"(B)itransitive verbs," says Paul Frank (NoLing. 45, p.20), "(e.g. 'buy', 'sell','give' etc.)", and so say we all, normally, and it is good enough for practical purposes in most languages. Our explorations in Ghana with a view to developing a semantically or lexically based display for the description and comparison of grammars show, however, that we need to recognise a tri-transitive or four-argument predicate type for the EXCHANGE group of meanings - "exchange", "swap"(Br.)/"trade"(Am.), "buy", "sell", "market", "trade", "cost", "pay", and so on. The intrinsic situation is a reciprocal change of state of the POSSESSION type:

A has X } A has Y
B has Y { B has X

As all four arguments are different there are 4x3x2x1 =24 possible permutations, all of them possible in English though some are more natural in special marked situations or constructions (e,g, cleft "$5 is all you pay Abe for a dog."). I give here just an example with each of the arguments as subject:-

He sold me a dog for $5.
A B X Y

I bought a dog from him for $5.
B X A Y

The dog cost me $5 from him/at Abe's
Y B Y A

$5 will secure you a bargain at Sam's Arcade
Y B X A

Researchers interested in voice and participant deletion ("The Voice of the Verb" (was Heard in the Land?) - Ulla Wiesemann, NoLing 44: 16-17) can have fun deleting all sorts of combinations:-

It will cost you an arm and a leg
X B Y

He sold me a pup
A B X

could be inverse perspective on same event, but note idiomatic nuance in Eng.

I bought a puppy from him
B X A

I bought a lemon
B X

She sells seashells.
A X

I paid &11.50.
B Y

He spent a fortune.
B Y

He sells for hard currency only.
A Y

Food costs money, you know.
X Y

The peasants trade with tourists.
A B

Vernacular Bibles sell (like hot cakes).
X

Are the Tokyo brokers buying? - No they're selling
B A

In English some roles are marked with prepositions, and you might want to argue that they are unemployed like a passive agent ("Theatre tickets are no longer sold by him" - X A !), but we should not allow theory-based prejudgment to blind us to the face that any language may lexicalize a verb with any combination of these arguments in its case-frame, and any one two or three may be treated as surface direct objects. For instance the English "cost" has a fairly unusual pattern, and it is a semantic argument to claim that "It cost you a fortune" has "a fortune" as patient and "you" as dative rather than "you" as patient and "a fortune" as, say, instrument or range. On the other hand English does not have a verb with the money (Y) as subject and the seller (A) as object - "$5 'deprives' Abe of a dog in-favor-of you" (YAXB) but it could perfectly well exist.■

Editing the Shipibo Dictionary according to Merriam Webster style

DWIGHT DAY

The development of the Shipibo/Spanish dictionary, now nearing completion, is a venture that was begun four decades ago. My involvement with this project began in 1983 when I received a collection of about 5,000 Shipibo word entries running through the letter S with four letters to go. This Shipibo side of the dictionary was based on field work done in the 1950s and '60s by James Lariot and Erwin Lauriault.

Norma Faust's Shipibo grammar was very helpful to begin language learning. I then undertook an extensive revision of the parts of speech apparatus and the grammar notes of the manuscript. Also, I reworked the large body of etymologies, placing them in a fuller and more standard form; eliminated much unneeded parenthetical material in the manuscript word articles; and expanded a list of Shipibo synonyms.

A valuable contribution to the work was made by Alejandro Ruiz, consultant on Shipibo literacy and school texts, who devoted many hours in service as the key Shipibo educator on points involving grammar and orthography.

I believe that the published Shipibo dictionary will be a useful model, or at least a source of reference in terms of format, for those working on future dictionaries. Different dictionaries, of course, present different problems. Yet linguistic universals, if they exist, do imply that on a deeper level there are common problems with common solutions in general lexicography. I present my format decisions for the Shipibo Dictionary as encompassing both the previous collective judgment of English language lexicographers and the consensuses reached with experienced consultants for bilingual lexicography.

At the outset of the project there was the problem of blending an old manuscript with a new one. Another complication was the fact that it was not possible to consult the major linguist-lexicographer. I decided that the rearranged format would be based on the closely reasoned standard found in the English dictionaries of the Merriam-Webster

series. My hypothesis was that a format that works well for a substantial monolingual dictionary will work equally well for a bilingual dictionary.

The standard format marker fields for the Shipibo side were:

\w \p *\pp *\e \d *\u *\l *\t *\syn *\s *\sd *\sl *\st.

The meanings of the field codes:

w = word, p = part of speech, pp = principal part e = etymology, d = definition, u = usage note, l = illustration, s = subentry, t = translation, syn = synonym article.

I also used \s(d,i,t) for subentry definition, illustration, and translation.

Asterisks to the left denote optional fields for the standard word article. Other optional elements and the cross-reference apparatus completed the list..

On the basis of these elements, a full word entry can logically read, "The Shipibo entry word "a" is a (designated part of speech) with principal part "b" it is derived from "c" or "c and d," more basic or earlier linguistic forms; it means "e" in Spanish, as further explained by a usage note and illustrated in Shipibo context "g", as translated into Spanish by "h" The word "a" has the notable synonyms "i" and "j" as commented on. Compounds or idiomatic phrases "k" and "l" which incorporate the entry word mean "m" and "n" in Spanish and are illustrated in Shipibo context by "o", as translated by "p"". These fields are here treated in order of appearance in the word article .

\w (entry word): first element of the entry article; to be printed in boldface.

The entry-word fields include not only the free form words and compounds of the language, but the affixes and bound form words as well. A principle of two dictionary consistencies--internal and external-- comes into play here. Internally, the word field must correspond to an appropriate part-of-speech label (nonlinguistic utterances are in general thus excluded). Externally, it must be alphabetical and match others in its part-of-speech class as to canonical form, if any. I chose a particlular inflection as canonical form of the Shipibo verb to produce another internal consistency

between entry form and gloss. Whereas the original manuscript matched the Shipibo preterite form (marked by the suffix *que*) in the entry slot with a Spanish infinitive as gloss, I chose instead an original Shipibo form with the suffix *-ti* as an expression of the infinitive form. The inclusion of the subword forms in the lexicon has the merit of introducing another external consistency, one between the word field and the Shipibo illustration sentences: ideally, all bound forms occurring in any illustration sentence will be found alphabetically in the vocabulary list.

\di (dialect variant) or \var (standard variant): variants, if any. Abbreviated label in italics; variant form in boldface.

There are three recognized sources of dialectal variants, identified as Conibo (coni.), Shetebo (shet.), and Pishquibo (pish.). All variants are identified simply in terms of phonological similarity with a canonical form, be it a main entry or a so-called principal part. Phonological similarity is broadly defined: if a pair of lexical items including one or more compound elements have an identical referent and no identified semantic distinction, only one compound element needs to be held in common between the two items in order that they be defined as dictionary variants. The standard form taken by these two equivalent fields, dialect and standard variant, is illustrated by the following excerpts from word entries.

bobón **coni.** ***bonbón*** *s.* : ***chupitos*** : **infección ...**[1]
ahuarampiti *tb.* ***ahuacampiti*** ...: **especie de bejuco...**[2]
bába nácashonti *tb.* ***bába pímati***: ... : **muela ...**[3]

Whereas in the manuscript dialectal root variants, including the first pair of the above series of examples, were given separate main entry, they are now consolidated without redundancy, as in the example. This decision is for economy and consistency . We are not talking about a Shipibo-Conibo lexicon with its implied ambiguities but rather a Shipibo lexicon with dialectal variants always recognized, though in a formally subordinate position.

\p (part of speech): follows either \w or any \var following \w.

The part-of-speech field, an abbreviated (usually traditional) label in italics, has been kept simple and general to defer any precise or analytical grammatical information to a grammar usage note following the gloss. It has included the traditional class names for the

parts of speech, suffix and prefix. The verb is qualified in traditional terms for transitivity; pronouns and demonstratives are likewise traditionally qualified (e. g., as *pron. pers* = **pronombre personal).**

The suffix and prefix labels are followed most frequently by **modif.** for **modificador,** an inclusive qualifier taken from the Shipibo **Lecciones** and taken to signal a semantic component as opposed to a more strictly grammatical inflection. This semantic/grammatical distinction may be seen in the suffixal parts ***iba*** and **que** of the word ***jolbaque*** "vino ayer"[4], with the suffixes entered as follows :

> ***-iba*** *suf. modif.* : *ayer ...* ***-que*** *suf. vbl.* : **--Usase como último sufijo de verbo principal para indicar acción terminada.**[5]

Conventional consolidation of functionally and semantically similar homographs (identical spellings) have been included under one entry as the linguistic structure has indicated . My format device is a double part-of-speech label, most frequently *adj.y s.(adjetivo y sustantivo)*[6] followed by a single part-of-speech label for each set of corresponding glosses. If, for example, for numbers or demonstratives, there is no stated difference in meaning for the different parts of speech, there is only the single compound part-of speech label at the beginning of the entry.

> ***ara*** *adj. y* **s. del ship.** ***árati*** **picarse en la superficie** *adj.* **: ahuecado** *... s.* **oxidación ...**[7]
> ***rabé*** *adj. y pron.* **: dos** ...

\pp (principal part): if present, in boldface.

The principal part slot contains a form that like the main entry is taken as canonical but contrasts with the main entry in altering its root form and usually in adding or substituting a suffix. The great majority of principal parts belong to one of two sets found in the manuscript and include one additional form for every noun and every verb of the language. These are derived regularly in almost all instances, but they seem nevertheless all worth including because of the inventory of several ergative inflections that show up among the noun principal-part forms and because of a stem change in a large subset of the verb principal parts.

> ***mápo s. mapón*** **: cabeza**[8] ...
> ***poró s. pórocan*** **: estómago**[9] ...
> ***chócati*** *v. t.* ***chócaa*** **: lavar**[10] ... **ó** ***choquíti*** *v. i.* ***chóquita*** **: lavarse**[11]

In revision, I expanded the principal-part category by addition of a small number of part-of-speech classes other than nouns, pronouns, and verbs. The small class of forms alternates with their respective main-entry forms in a manner grammatically analogous to that of either the noun set or the verb set E.g,. ***acáma*** *adv.* ***icáma*** **: no ...** The goal here has been to avoid redundancy between two morphologically similar entries with identical gloss/definitions while keeping the principle of consistency in the principal-part category throughout the dictionary.

\ppd, ppv (principal part dialect or standard variant): optional. Nouns and verbs that show a variant of their entry forms predictably have an analogous variant of their principal-part forms. Some nouns and verbs, moreover, show one or more phonological variants of the principal-part forms alone within the entry article.

bobón *coni.* ***bonbón*** *s.* ***bóbonman*** *coni.* ***bóbonman*** **: chupo[12] ...**
áinbo *s.* ***áinbon*** *coni.* ***áinbaon*** *pish.* ***ánbaen*** **: mujer[13] ...**
janquénhati *v. t.* ***janquénhaa*** *coni.* ***janquénhaca*** **: terminar14 ...**

\e (etymology): optional. Marked at boundaries by brackets and internally by a distinctive and formulaic format. Although it is true that apart from written records a language simply does not have the linguistic chronicles on which traditional etymologies depend, it does not necessarily follow that there is no useful etymological work to be done in an unwritten language. Nearly all the compiler's native Shipibo etymologies consist of mere morpheme analysis, but such information is by no means always either redundant or obvious. Even where the etymological information can readily be found elsewhere in the dictionary, it is almost always juxtaposed in such a way as to shed light on the meaning of the entry word by suggesting a "literal sense." It has the potential, moreover, of introducing interested outsiders to Shipibo morphology and Shipibo initiates to the notion of morphological analysis by way of familiar words in their own language. Also it often serves the interested user as an informal source of enlightening cross references while leaving the cross reference slot free for a more restricted and focused use. By including origins of loan words from Spanish and Quechua, moreover, the etymology category highlights by contrast the distinctive phonological structure of the language and offers frequent suggestions of the nature of historical cultural contacts between the Shipibo and two larger neighboring societies.

\d (gloss/definition): Marked at beginning and internally between equivalent gloss/definitions by a boldface colon between spaces and by sense numbers in cases of multisense entry words. Replaced optionally by \dq, to be described next.

Here, in this traditionally key element in a dictionary, the influence of the Merriam-Webster format model is perhaps most evident. Visually, the boldface colon preceding gloss/definitions stands out. The boldface colon, called symbolic colon in the Merriam format, emphasizes a desired independent and direct relation of each gloss/definition to the entry word. With ordinary punctuation, in contrast, equivalent gloss/definitions may tend to blend into one another.

Another distinctive feature in my chosen format is the so-called logical sense divider, introducing a subsense after a logically related sense by means of a lightface semicolon followed by the abbreviation *especif.* (= **especificamente**)[15] or *tb.*(= **también**)16. Examples follow.

ba- pref. modif.

1) **: en el sobaco: del sobaco**[17]
2) **: en el pecho : del pecho**[18]
3) **: en el brazo : del brazo**[19]
4) **: de manga corta**[20] *..nequénmasen ...*: *ishpingo*; *tb.* **: el fruto del ishpingo**[21]

Note first, with the last given example, that the distinction between the "tree" and "fruit" senses is stated rather than taken for granted and that a conveniently brief gloss like "its fruit" after **:ishpingo** is not used. The principle observed here is that of self-containment. No reference is made, as by a pronoun like *su*, from any word-entry element to an element outside itself, even to a neighboring gloss, (The single exception is a permissible reference from the \q to the \d field, since the second is by nature a comment on the first.) By the same no-outside-reference principle the pronominal generic objects such as "lo" and "le", apparently traditional in Hispanic lexicography but necessarily vague in application, are also excluded from the gloss slot.

Characteristics of the gloss/definition format include its optionally compound structure, designed to include analytical or periphrastic definitions and so-called formulaic defining, particularly for groups of terms that fall with strong logic into a definitional class. One obvious

candidate for group defining is the whole class of definitions for flora and fauna: all have been given the formula "x : especie de y", with an adjective such as "grande" optional after "especie".

***cáshibo* : grupo etnolingüístico cacataibo : la gente cacataibo : los cacataibo**[22]

***Méa* *s.* : --Usase como nombre personal femenino.**[23]

***Níma* *s.* : --Usase como nombre personal masculino.**[24]

Another feature of the \d field is the so-called parenthetical adjunct, otherwise called qualifying comment. It is strictly limited, much as in Merriam-Webster usage, to an implied object in a transitive-verb definition, an implied subject of an intransitive verb, or to a prepositional phrase giving typical semantic limitations on a noun in a definition. All other kinds of qualifiers in definitions are taken either to belong as integral elements without parentheses or not to belong at all. Spanish-to-Spanish glosses of obscure or ambiguous words, such as regional Spanish terms, are also excluded. (I have chosen to handle these by means of a regional glossary in the "back matter" or appendixes. The reader will be referred to the glossary by an asterisk before a regional term wherever it appears in the dictionary.) Thus the adjunct or comment is given a particular and easily recognizable function in the gloss/definition.

The parenthetical adjunct or qualifying comment is marked off by parentheses and, if typical subject or noun qualifier, introduced by the abbreviation p. ej. (= por ejemplo) followed by a comma.

***astóati* *v. t.* : llenar (p. ej., un huso o una bobina) de hilo**[25]

***bámati* *v. i.*: aparecer pronto (mitayo escondido)**[26]

***ašhánti* *v. t.* : pescar con veneno (p. ej., de huaca o barbasco)**[27]

One internal consistency much watched for where verb entries and especially transitives were concerned, has been that between the gloss/definition and the part-of-speech label. It is easy for the definer in the heat of defining a verb to forget about the transitivity.

\dq or \q (\q = usage note; \dq = usage note to replace gloss/definition); the same word-entry element in form in either case. \dq takes place of a \d field in numbered sequences of gloss/definitions, if any. \q immediately follows \d or \dq and comments on it. These are marked in the formatted dictionary by a preceding long dash for opening punctuation followed by "used" as invariable first word and by normal sentence punctuation thereafter.

The usage note adds information to the gloss/definition by way of further comment for the purpose of grammatical or social orientation. Grammatical information may be morphological or syntactic, or may be a collocation restriction. Social information may concern a social, temporal, or dialectal restriction. If the usage note is a substitute for the gloss/definition, it provides an indirect way of getting at the meaning of the word by grammatical explanation rather than definition. Examples follow.

> ***johué*** *interj.* ... **--Usase como saludo a cualquier hora ...**[28]
> ***irimanó*** **: hermano en la fe --Usase entre los adventistas y los evangélicos.**[29]
> ***chíchi*** *s.* : ... 2) **: autoridad suprema --Usase mayormente entre los conibo.** [30]
> ***baquénqui*** *s.* **: suegro de mujer --Usase poco actualmente.**
> **átipanti ... : poder. --Usase con infinitivo transitivo como complemento.**[31]
> ***bo*** *suf. de s.* ... 1) **--Usase para formar el plural de sustantivos que se refieren generalmente a conjuntos de seres humanos ...**[32]

\i and \t (illustrative example and translation): marked off at boundaries by angle brackets with Shipibo text in boldface and translation in lightface. If sentence, normal sentence punctuation; if word, no punctuation. The illustration texts of a substantial dictionary can be as much the real meat of a word entry for getting at its meaning as the definition; hence the care in my chosen format to highlight the illustrative material not only with the bold typeface consistent for all Shipibo text as such but also with angle-bracket closures or their equivalent. Examples follow.

> ***ábion*** *s.* ... ***avión*** **....<Rímanmea ápo ábionin rároque. Cuando el Presidente vino de Lima en avión nos alegramos>**[33]
> ***ba*** *pref. modif.* 1) **: en el sobaco ... <*** ***bánoti*** **estoquear en el sobaco ...>**[34]

The main format change called for here has been the elimination of many Spanish glosses of Spanish words and phrases bracketed with internal equal signs within the translation sentences. These glosses have been either eliminated or used to replace the glossed word or phrase, all in accordance with the principle of economy: the eye should not be impeded in its search for direct information by the baggage of unnecessary symbols and words. The deletion of brackets

here, moreover, lends higher recognition to the single, unambiguous use of these symbols in the etymology field.

\syn (synonymy, or synonym article): a short article following \d, \dq, \q, \i, or \t, whichever comes last, and giving a statement of identity and difference, if differences are noted, in translated meaning between two or more Shipibo words compared. Marked at beginning by a paragraph separation. Introduced by the boldface abbreviation **sinon.**, followed by the Shipibo synonymy words in capital letters and separated by commas. The synonymies appear at the first entry word in each synonym group alphabetically with cross references at the other words in the same slot where the synonym article would appear.

Like the etymology, the synonym statement departs from the strict meaning of a corresponding statement in a monolingual dictionary but the category as adapted has seemed to offer information which, although found elsewhere in the dictionary as well, is brought together here in a useful way. The groups of words compared are chosen on the basis of being translated in the same way in Spanish and may or may not be found interchangeable in Shipibo-language contexts: they might better be called translation synonyms. The differences stated fall into three areas: exact meaning, relative status or preference, and grammatical cooccurrence. The three types are illustrated respectively in the following articles.

nínati *... sinon·* NINATI, NITI **los dos se pueden traducir pararse o andar. Sin embargo,** NINATI **más implica una situación de pararse o andar en forma sana o normal, mientras que** NITI **más implica la acción dificultosa, p. ej., de un bebé o un enfermo.** [35]

áyahuasca *... sinon·* AYAHUASCA, NISHI, ONI **denotan la ayahuasca.** AYAHUASCA **y** NISHI **se usan entre los shipibo para designar tanto la bebida como la planta; y** ONI**, en cambio, es apenas empleado. Entre los conibo se usa** NISHI **para denotar el bejuco; mientras** ONI **es el nombre de la substancia derivada, y** AYAHUASCA **se emplea menos.**[36]

-caa *... sinon.* -CAA, -COO, -EE, -II, -OO, -QUEE, -QUII, **sufijos de verbo no finales, y sus formas prevocálicas (p. ej.,** -CAAT**) que se diferencian sólo por su** *t* **final, cada uno igualmente da sentido reflexivo a cualquiera de ciertos verbos transitivos cuando se encuentra ese sufijo agregado a la raiz del verbo.**[37] **Luego cada sufijo se usa sólo con una clase de verbos.**[38]

\s (subentry): appears optionally as last slot in the word article format; separated as a new paragraph from the main entry. Introduced by a long dash followed by the subentry expression, followed by a definition and optional illustration and translation sentence as in main-entry format. No part-of-speech label.

After some vacillation, I have recently decided to limit my subentry category to idiomatic phrases, even though these include a rather small group for the Shipibo Dictionary. This decision reflects my own judgment that compound and derivative words are more logical candidates for main entry than for subentry. A group of flora-and-fauna compound nouns listed as subentries under root form main entries in the manuscript thus become alphabetical main entries, but are root-analyzed in etymologies and will appear in lists after appropriate main entries on the Spanish side of the dictionary.

The idiomatic phrase is defined as a phrase which includes the main-entry word and is not self-explanatory. It usually follows that in the idiomatic phrase the meaning of the entry word is lost or obscured. My guideline for choice of main entry under which to place the subentry is vague and only suggestive: choose the word in the phrase which seems to carry the semantic focus. In any case I include a subentry cross-reference at one other main entry represented in the phrase.

> ***quéni*** **s. : *barba* ... *--quéni óroti* [del ship. *quéni barba + oroti* cultivar]: afeitarse ...**[39]
> ***néte s.*** **...: día ... *--néte shabaáti* [del ship. *néte día + shabáati* librar, limpiar] :amanecer : hacerse de día ...***40*

\r, \sr, \ser (reference, synonymy reference, subentry reference): consist simply of a main-entry or subentry word and the direction "Véase" [41]

Cross reference entries are main entries which are kept minimal in the interest of avoiding what can seem like pointless and confusing redundancy of information. Their one function is to redirect the reader from one main-entry form which he has found in its alphabetical place to another main entry where he will find the information he is looking for. Cross references in the present format are of three kinds: simple, synonym, and subentry. Simple cross references follow a variant form and point to the standard-form main entry where alone the dictionary information is to be found for both

forms. Subentry cross references appear alphabetically in the cross reference slot at one of normally two words in an idiomatic phrase, directing the reader to a full subentry under the main entry for the other word in the idiomatic phrase.

agénte **Véase** ***ajínti***
-coo ... ***sinon*** **Véase** ***-caa***.
šhabáti ... ***--néte šhabáti*** **Véase** ***néte***

Punctuation: normal sentence punctuation for the usage note, illustration and translation sentences, and synonymy articles; no punctuation elsewhere except as necessary to avoid ambiguity.

In general, sentences are punctuated; lexical items and gloss/definitions are not. By excluding punctuation from the gloss/definitions, the linguist/lexicographer or editor imposes a discipline that works for concise and clear analytical definitions. Boundaries between word-entry elements are marked not by punctuation but by distinctive typefaces or symbols. Thus minimum punctuation makes for a less cluttered flow of words, important for accessibility of items in such a mass of information.

A few words in summary:

The format worked out for the Shipibo Dictionary, Shipibo side, is not without its loose ends and question marks-- I note, for example, the experimental nature of the synonym article and the perhaps more pragmatic than logically rigorous use I have made of the principal-part slot. But to me the beauty I have found even in those areas in using a ready-made comprehensive format is that its elements, being abstract, are flexible: : they can be re-defined and still stand together in the same logical relationship as in the model. A well-wrought dictionary format can be adapted, I have found, to a kind of dictionary that its creators never envisioned.

Notes

[1]**Editor's note: We here add English translations of the Spanish where such translations seem to be useful. The translations are given in upper case. E.g., in this case, TOOTH. .**
[2]**A KIND OF VINE**
[3] **TOOTH**
[4] **HE CAME YESTERDAY**
[5] **USED AS THE FINAL SUFFIX OF A PRINCIPAL VERB TO INDICATE TERMINATED ACTION**
[6]**ADJECTIVE AND NOUN**

[7]FROM THE SHIPIBO **árati** TO PRICK ONESELF SUPERFICIALLY... OXIDIZATION
[8]HEAD
[9]STOMACH
[10]TO WASH
[11]TO WASH ONESELF
[12]A BOIL
[13]WOMAN
[14]TO WASH
[15]SPECIFICALLY
[16]ALSO
[17]IN THE SMALL OF THE BACK, OF THE SMALL OF THE BACK
[18]IN THE CHEST, OF THE CHEST
[19]ON THE ARM, OF THE ARM
[20]HAVING A SHORT ARM, SHORT-ARMED
[21]THE FRUIT OF THE **ishpingo** TREE
[22]THE CASHIBOS: THE ETHNOLINGUISTIC GROUP CALLED THE CACATAIBO: THE CACATAIBO PEOPLE: THE CACATAIBOS
[23]USED AS A FEMININE PERSONAL NAME
[24]USED AS A MASCULINE PERSONAL NAME
[25]TO FILL, FOR EXAMPLE WINDING A ROLL OR FILLING A BOBBIN
[26]TO APPEAR QUICKLY (AS OF HIDDEN GAME ANIMALS)
[27]TO FISH WITH POISON (FOR EXAMPLE, USING THE HUACA OR BARBASCO PLANTS)
[28]USED AS A GREETING AT ANY HOUR OF THE DAY
[29]A BROTHER IN THE FAITH, USED AMONG ADVENTISTS AND EVANGELICALS
[30]A SUPREME AUTHORITY, USED MAINLY AMONG THE CONIBOS
[31]THE MOTHER-IN-LAW OF A WOMAN --USED VERY LITTLE AT PRESENT. ... TO BE ABLE. USED WITH A TRANSITIVE INFINITIVE AS COMPLEMENT
[32]USED TO FORM THE PLURAL OF NOUNS THAT GENERALLY REFER TO GROUPS OF HUMAN BEINGS
[33]WHEN THE PRESIDENT CAME FROM LIMA IN A PLANE WE REJOICED
[34]IN THE SMALL OF THE BACK "THE HUNTER'S CACHE STRIKES HIM IN THE SMALL OF THE BACK"
[35]THE TWO CAN BE TRANSLATED "TO STAND" OR "TO WALK". NEVERTHELESS, **nininati** IMPLIES MORE A SITUATION OF STANDING OR WALKING IN HEALTHY OR NORMAL FASHION WHEREAS **niti** IMPLIES AN EFFORT, SUCH AS A BABY OR A SICK PERSON.
[36] ... DENOTE AYAHUASCA. **ayahuasca** AND **nishi** ARE USED BY SHIPIBOS TO DESIGNATE BOTH THE DRINK AND THE PLANT; **oni** ON THE OTHER HAND IS SCARCELY USED. AMONG THE CONIBO **nishi** IS USED TO DENOTE THE VINE WHILE **oni** IS THE NAME OF THE DERIVED SUBSTANCE AND **ayahuasca** IS USED LESS.
[37] NON-FINAL VERB SUFFIXES AND THEIR PREVOCALIC FORMS, (E.G. **-caat**) THAT DIFFER ONLY BY A FINAL **t**, EACH ONE GIVING THE SENSE OF REFLEXIVE TO ANY OF CERTAIN TRANSITIVE VERBS WHEN THIS SUFFIX IS FOUND ATTACHED TO THE ROOT OF THE VERB.
[38]THEN EACH SUFFIX IS USED ONLY WITH A CERTAIN CLASS OF VERB
[39] FROM THE SHIPIBO **queni** BEARD + **oroti** TO CULTIVATE (A FIELD): TO SHAVE ONESELF
[40]FROM THE SHIPIBO **nete** DAY + **shabaati** TO CLEAR, TO CLEAN: TO BREAK DAYLIGHT: TO DAWN
[41] SEE

The Relationships Between Predicates

URSULA WIESEMANN

To complete the research on the verbs the full range of the possible relationships that may hold between two or more predicates should be explored. To help this one may consult a list of such relationships (as found, for example, Longacre, R. E. (1983) *The grammar of discourse*. New York: Plenum Press, chapter 3) or the following. In any case the list will contain certain relationships that the language under investigation does not have special markings for, whereas other relationships may not be fully spelled out.

The following list was drawn up on the basis of at least one in-depth analysis of an African (Bantu) language in Cameroon. The work on this section would best be done after the analysis of the aspect-mood system and after the verb phrases have been recognized and described. Some of the relationships will be expressed by a conjunction, others will be covertly signaled by the juxtaposition of the two clauses without any overt connector. These are the most difficult to recognizeäand therefore handled correctly and naturally in translation. Even the natural speaker will have a tendency to make the relationship overt by using a connective if the language he translates from has one, which often will result in unnaturalness and probably in a shift in focus. Therefore this part of the research is not only the more difficult but also the more important. It can more easily be done after the overtly marked relationships have been fully explored.

There are several places where one can look for formal markings of covertly expressed relations between predicates:

a) the possible insertion/deletion of the relevant conjunction

b) the possible combinations of the verb forms found in researching the aspect-mood combinations

c) the ordering of the subordinated clause in relation to the main clause

All the outlined relationships should be researched for same-agent/different-agent combinations as the two verbs are joined:

1) **ACCUMULATION:** '(and) he eats and (he) drinks and (he) lives any old way'
2) **CONTENT:** 'he says that he should come'
3) **EXAMPLE:** 'give him a nice name, call him Bob'
4) **PHASE (OR ASPECT):** 'he started, he cried'
5) **DEIXIS:** 'take the book, it's on the table!'
6) **RELATIVE CLAUSE** ä this actually will be the subject of another questionnaire and can be left out here.
7) **COMPARISON OF BEING LIKE:** 'he is strong like an ox (is strong)'
8) **COMPARISON BY DEGREE:** 'he is as strong as/stronger than an ox (is strong)'
9) **COMPARISON BY CONTRAST:** 'he drinks but he does not eat"
10) **COMPARISON BY EXCEPTION:** 'all died but the cat (did not die)'
11) **COMPARISON BY ALTERNATIVE:** 'he neither eats nor does he sleep'
12) **REASON:** 'I've washed the clothes because they were dirty'
13) **AIM OR INTENTION:** 'he took a taxi so that he could get there on time'
14) **CONSEQUENCE:** 'he insulted me so I beat him.'
15) **SIMPLE CONDITION:** 'if you work for me I will pay you'
16) **WARNING:** 'don't cry, (or) you will wake the baby'
17) **HYPOTHETICAL CONDITION:** 'if he comes, I will leave'
18) **DISTRIBUTION CONDITION:** 'if he says a word or moves I will throw him out'
19) **PROPORTIONAL CONDITION:** 'the faster I go the more tired I get' 'the sooner you start, the sooner you'll be done'
20) **UNREALIZED CONDITION:** 'if he had eaten well, he would have made it'
21) **POLAR QUESTIONS AND ANSWERS:** 'did he eat?' yes/no (don't know)'
22) **INFORMATION QUESTIONS AND THEIR ANSWERS:** 'who did it?', 'what did he do?', 'where did he go?', etc.
23) **CHOICE QUESTIONS AND THEIR ANSWERS:** 'do you take coffee or (do you take) tea?' '(I like) coffee.'
24) **CONFIRMATION (TAG) QUESTIONS AND THEIR ANSWERS:** 'you need a notebook, don't you?'
25) **SIMULTANEOUS ACTIONS:** 'he came (while he was) running'
26) **ANTERIOR ACTIONS:** 'he left before they had eaten'
27) **SEQUENCE ACTIONS:** 'he came and (he) ate' [see also accumulation]
28) **EXACT REFORMULATIONS:** 'he left, and as he departed . . .'
29) **REFORMULATION BY NEGATED ANTONYM:** 'he left, he wouldn't stay any longer'
30) **AMPLIFIED REFORMULATION:** 'he left, he departed without saying a word'
31) **SUMMARY AMPLIFICATION:** 'they dug, sifted, scraped, classified ä they worked without stopping'
32) **ANY OTHER KIND OF RELATIONSHIPS MARKED (IMPLIED) IN THE LANGUAGE!**

USING TABLES IN MICROSOFT WORD

Bryan L. Harmelink

Microsoft WORD[1] provides many features that can be used to great advantage in the entry, processing, and presentation of data collected in the field. Being able to use WORD on practically any laptop available today makes it possible to take WORD's high-powered features virtually anywhere (this is being written on a Toshiba T1000 using WORD version 5.0).

One of the features of WORD that was new as of version 4.0 is the ability to create indexes and tables. The purpose of this article is to discuss some of ways that the perhaps little used table creation feature of WORD can be put to work for the field linguist.

The WORD version 5.0 manual gives a very brief introduction to the use of tables in chapter 31, concentrating almost exclusively on the creation of tables of contents. While the creation of tables of contents is a very powerful feature, the focus of our discussion here goes beyond tables of contents to other kinds of tables that can be made.

Making Tables in Word

What is the difference between an index and a table?

WORD provides functions for creating both indexes and tables. The way in which the items are tagged for inclusion in an index and a table is the same. They both use the same codes described in the next section. The main difference between the index and table functions is the flexibility that you have to use a wide variety of table codes with the creation of tables whereas the index code is limited to i. One of the differences in the *format* of an index as compared to a table is that the index function will combine the page numbers on which the selected item is found. The table, unlike the index, lists each page number on a separate line as seen in the following example:

Index: entry
12, 23, 34

Table: entry
12
entry 23
entry 34

The index function is, of course, very useful and powerful, but only one index can be created from a file unless the index codes are inserted, deleted, and then reinserted for a second kind of index, making it impossible to quickly generate the first index if needed. Tables, however, provide greater flexibility since several different table codes for tables can be used in the same file at the same time.

A valid question to ask is whether an entry can be tagged for inclusion in both a table and an index. Yes, it is possible to place index and table codes around the same word or string in a document and include it in either an index or in different kinds of tables. More will be mentioned about this in the section of examples. This has been tested with as many as 11 different table codes and the index code with no resulting difficulty in making the tables or the index.

How to create a table

A table is created in WORD by selecting the Library Table option from the menu which gives the following submenu:

LIBRARY TABLE from: Outline (Codes) **index code: C**
page numbers (yes) no **entry/page number separated by:**
indent each level: .04 **use style sheet: yes (no)**

WORD formats a table on the basis of embedded codes that you place in a file. You can specify what codes are to be used for the creation of a table.[2] WORD assumes C as the default code since the primary purpose of the Library Table option is the creation of tables of contents.

The codes which WORD uses consist of a single letter in between a set of periods. This string of three characters must then be formatted

as hidden characters. If the code is not formatted as hidden, no table will be compiled, and the message **No entries found** will appear at the bottom of the screen. The table entry will consist of everything between the table code and the next return. To have a single word of a sentence or paragraph placed in the table, the table code must be accompanied by a closing semicolon, which is also formatted as a hidden character. In both of the following examples the word entry will appear in the table.

.x.entry

this is the **.x.entry;** that will go to the table

If you want the same word to be included in an index and two tables (with codes x and s) the above examples would look as follows:

.i..s..x.entry

this is the **.i..s..x.entry;** that will go to the index and tables

You may decide whether or not to make the hidden characters visible on the screen by making the appropriate selection through the Options menu. They may be formatted either by using the speed formatting key combination Alt-e or by choosing the hidden format in the Format Character menu.[3]

Before a table is created it is highly recommended that you make sure that the proper page breaks are in the document. WORD will paginate the document as part of the table creation process and if any hard page breaks need to be inserted for proper pagination, this must be done before the table is created.

The actual creation of the table is done by entering the Library Table menu. Once in this section of the menu, it is necessary to specify the proper table code, as well as any other options that apply, and then typing return. WORD will first of all search for an existing table, and query you as follows:

Table already exists. Enter Y to replace, N to append, or ESC to cancel

Entering Y will wipe out any previously created table with the same code. If you enter N to append a new table will be added to the end

of the existing table. In most cases, you will want to replace the table rather than append a new one.

The table is placed at the end of the file beyond the division mark (the double dotted line). The first and last lines of the table are automatically formatted as hidden characters and, assuming .s. is the table code, appear as follows:

.Begin Table S.

(Table)

.End Table S.

Once the table is created at the end of the document, you can do whatever is needed with the table. It can be copied to another part of the document, copied as another document, or left where it is for future reference.

An easy way to copy the table as a new document is to open a new window (selecting Window Split Horizontal from the menu and then entering the line number for the split and clearing the new window). Once window 2 is open, use F1 to return to window 1, select the table with F6 and the arrow keys or the mouse, delete it, and then move to window 2 with F1 and insert the table. This can easily be done with a series of files to join several tables into one.

Once the table is copied to its destination, its character, paragraph and division format will need to be handled. There is no automatic format given to the table beyond that which is specified in the Library Table menu.

EXAMPLES OF TABLES

In this section, several situations in which the table feature of WORD is useful will be presented. The number and kind of tables that could be made from a given document are endless--this is merely a list of some of the tables that have been used by the author.

The examples to be discussed here are tables of:

- Contents
- Incomplete sections of large files
- Glossary entries

- New vocabulary and language examples

In the process of writing and editing a pedagogical grammar, I wanted some way to keep track of these things in my files. Compilation of tables with WORD provides an easy way to do this.

Tables of contents

As stated in the introductory comments above, the WORD manual gives basic instructions for the creation of tables of contents. This is, of course, a very useful feature of WORD allowing you to create, from the file itself, a table of its contents. The Library Table option from the WORD menu defaults to c as the assumed table code, presupposing that this is the main way in which the command will be used.

Creating a table of contents is done by following the steps outlined above. You must decide what format to give it and you must also cut and paste the table of contents into its proper position in your file. A nice modification to WORD would be the option of having WORD place the table of contents at the beginning of the file where you most likely want it to be, but at present the tables are placed just beyond the division mark.

One very useful feature of the table creation that does not come into play as much in the following examples of tables is the indentation of different levels. The indent is specified in the Library Table sub-menu in the field **indent each level:**. In order to have WORD indent level of a table, the table code must be followed immediately by a colon as seen in the examples that follow:

In the text:	**As seen in the table:**	
.c.The verb	The verb	12
.c.:The person marking system	The person marking system	14
.c.::First person	First person	14
.c.::Second person	Second person	17
.c.::Third person	Third person	19

Once the table of contents is created at the end of your document, cut and paste it into its place at the beginning of your document or use another window to save it as a different file.

Incomplete sections of large files

In the process of writing or editing a large document, such as the pedagogical grammar mentioned above, it may be necessary to leave some sections incomplete for completion at a future date. It is very easy to lose track of such sections in the middle of a 40-50 page file, but using a table can help keep tabs on them. The following are examples of the kind of comments that can be inserted as separate paragraphs at the beginning of incomplete sections:

.s.incomplete section dealing with pronouns
.s.unfinished section on the articles
.s.need more work on aspectual morphemes

The following shows what a table from the example above would look like:

.Begin Table S.

incomplete section dealing with pronouns	23
unfinished section on the articles	34
need more work on aspectual morphemes	43

.End Table S.

When a incomplete section tagged with a table code is finished, therefore making its further inclusion in the table unnecessary, merely delete the code and comment. When you create another table, it will reflect the updated status of your incomplete sections.

WORD's bookmarks (version 5.0) can also be used to keep track of specific places in long documents. Since this function of the bookmarks is so similar to the table mentioned here, a brief introduction to bookmarks is included.

One of the immediate payoffs that you can enjoy from bookmarks is being able to quickly jump around to specific places in a file. This feature allows you to avoid scrolling through screen after screen of a long document. With a bookmark, attached to highlighted text by using Format bookmarK, the user can go instantly to the specific line or word desired. Names given to the bookmarks can be seen by using the F1 key at the prompt for the Bookmark name.

By designating a bookmark in an unfinished section, you can keep track of these sections in a way similar to the table mentioned above. Following the conventions given for bookmark names in the WORD

manual, the name can be up to 31 characters long (the column number at the bottom of the screen can help keep track of the length of your bookmark name), so it would be possible to give the following kinds of names:

more_work_needed_on_nouns
incomplete_sctn_on_vb_endings
need_more_examp_of_reflexive

When you want to check your document for unfinished sections marked with bookmarks, you would select Jump bookmarK and either directly enter the bookmark's name or select it from the list of bookmark names that can be viewed by pressing F1 when prompted for the name.

Bookmarks are removed by first of all selecting the text to which the bookmark was attached. Once the text is selected, through Format bookmarK option, remove the bookmark by hitting <enter> when prompted for the bookmark name. You will then be asked to enter Y to confirm deletion of bookmark(s).

Bookmarks provide a quick way for moving around in a file as well as for keeping track of different locations in a file. One of the limitations of using bookmarks for keeping track of these kinds of things, however, is that there is no way (currently known to the author) to directly print the bookmark names with page references. The beauty of the table approach to this situation is that the table can be printed and consulted while editing not only in a session in WORD, but also while editing a printed copy of the document away from your desktop or laptop.

Glossary entries

Another kind of table used in the pedagogical grammar is one in which grammatical terms that were to be placed in a glossary were tagged with table codes. A table was used for this rather than an index in order to allow the index code .i. to be used for the topical index of the whole book.

At virtually any point in the editing process, the table codes can be attached to the item(s) or phrase(s) to be pulled out and indexed at a future time. During the editing process, it is most likely preferable to keep the codes formatted as hidden characters. Whenever you want

to review what has been tagged with the codes, merely make the hidden characters visible through the Options menu and then hide them again when you wish to resume editing.

The following examples show some different stages of a table which will eventually be used to make a glossary:

A) The table as made by WORD:

.Begin Table X.

mood	12
voice	23
aspect	34

.End Table X.

B) Sorted table

.Begin Table X.

aspect	34
mood	12
voice	23

.End Table X.

A table of glossary entries will require much more manipulation than the preceding example of incomplete sections. One of the primary interests in a table of incomplete sections is the sequential ordering of the page references. The entries in a table for a glossary cannot be left in the order in which WORD places them since they need to be in alphabetical order.

The Library Autosort option provided by WORD gives a good way to alphabetize the table once it is created. Select the entire table with either F6 and the arrow keys or the mouse and type the sequence ESC L A <enter> and the table will be alphabetized. Note that if you have the hidden characters visible on the screen and they are selected before the sort, they will also be sorted into the table. However, if the hidden characters are not visible, they will not be moved by the sorting process. Example B above shows the table from A in alphabetical order.

Example C below shows what happens when a new table with additional entries is appended to the table shown in B. Note that the items from the original table are also included in the new table, making it possible to retain a record of the previous stage of the

table. Most of the time, however, you will want to replace the table rather than append a new one.

C) Existing table with new table appended:

.Begin Table X.

aspect	34
mood	12
voice	23
(blank line left by WORD)	
mood	12
tense	18
voice	23
inflection	25
derivation	28
aspect	34

.End Table X.

The table as it is created by WORD is, of course, only the first step in making the glossary of grammatical terms. It will be necessary to add the definitions of the items that have been extracted from the document. Once a copy of the table has been made in another file, you can add the definitions or whatever information is necessary.

It is easy to imagine the following situation: While reviewing the document from which a table was created, you have found other entries that need to be added to the glossary. What do you do? This will depend on several factors such as the size of the glossary, whether the glossary has already been alphabetized, and whether you have already entered most of the definitions. You need to use your judgement in deciding the best way to incorporate these additional entries into the glossary. If the glossary is essentially complete with most of the definitions already entered, then it would probably be best to merely cut and paste the additional entries from a new table into the file which contains the glossary. The ideal situation is to have the table complete before any additional information is added to it.

There is one other way of entering definitions or other information to be included in the table that avoids the problem just mentioned. The definitions can be entered right in the document along with the table entry by using the following procedure: Insert the table code .x. right before the word to be entered in the table. Then, place a tab after

the word and type the definition that will go in the glossary. End the definition with a semicolon. Format the .x. and the tab through the semicolon as hidden characters (everything but the table entry). This will send the desired word to the table along with its definition and the appropriate page number. One benefit of this approach is that you are able to take advantage of your current thinking as you are writing. The relevant points that you might want to make reference to in your definition can be forgotten if you wait until later. An example follows:

A) As it appears in the document:

.x.word<tab>definition; (everything underlined must be formatted as hidden)

B) As it appears in the table:

word definition page number

This will keep all the words and their definitions together right in the document. Any time a new table is made or appended, all the definitions that have been entered in this way will appear in the table. Since the definitions are formatted as hidden characters, they won't be printed as part of the document,[4] but they will always be there for the table. When you want to check on which definitions have been entered, you can switch to visible hidden characters on the screen and they will appear.

The table formed from this procedure can be alphabetized whenever you want by using the Library Autosort function. The definitions will not be lost or separated from their entries nor will they affect the sorting process.

Keeping track of new vocabulary and language examples

The table creation feature of WORD can also be used to extract new vocabulary words or language examples from text files. A table provides a quick way to obtain a list of these items with a page number reference to their context. This gives payoffs for language learning and dictionary creation as well as collecting natural language examples. Since the table codes are hidden characters, they do not interfere with subsequent editing or printing of the texts from which they come.

By adding a header to the table with information such as the date the table was created and the name of the file it came from before saving

it to another file, you have a useful, printable record of the source of the examples. Also, you can delete the page numbers (and the tabs separating them from the entries) and save the word list from the table as an unformatted file for use in other programs or databases.

CONCLUSION

The types of tables presented here are only a few of the ways in which they can be used to advantage. You, as the user, will undoubtedly find other ways to benefit from this perhaps little used feature of WORD.■

NOTES

[1] The features mentioned here are in WORD versions 4.0 or 5.0

[2] The letters i, l, d, g are reserved by WORD for indexes and the inclusion of other files within WORD.

[3] The user may also wish to use a macro to do the formatting of these characters.

[4] It is, of course, possible to print text formatted as hidden characters if the proper selection is made in the Print Options menu.

* * * * * * * *

(Whatever happened to me? cont'd)
to do with the *I-me* distinction--of the Australian who exclaimed, "You know what drives me buggy?" then answering his own question said, "Me horsie, of course."

So I predict that *me* in some form or the other will stick around in Australian English a long time after Americans have obliterated it from their speech. Well, maybe not completely obliterated it. I can't imagine an author allowing his fair young heroine (pounding on the door as she is hotly pursued by a wolf) to reply to the "Who is there?" query by screaming. "It's I! It's I! Open the door!" Nor can I envision Americans singing. "It's I, it's I, O Lord, standin' in the need of prayer."

An Appeal for Examples to Guide CADA Development

DAVID WEBER

This paper is an appeal for examples of a particular kind, needed to guide the development of a program for computer assisted dialect adaptation (CADA). CADA seeks to automate the process of producing, from a text in one language, a draft of that text for a closely related language.

We will begin with some background, proceed to several examples of the type which we hope the reader will contribute, and finally, conclude with a list of the criteria for a good case.

CADA is possible for closely related languages because these mostly differ in ways that are "systematic," relative to some analysis. To date, most CADA projects have followed a word by word approach, using as the analytic basis for changes, the decomposition of words into their morphemes. This approach was chosen simply because it was effective for the languages for which CADA was being developed. A word by word approach, however, is not an inherent feature, nor a limitation, of CADA. It is simply where we began.

Efforts are now under way to use syntactic parsing (in cooperation with morphological decomposition) as the analytic basis of adaptation. Bob Kasper, Steve Adawole and Bill Mann are exploring the possibilities for Bantu languages, and Al Buseman and Tom Godfrey, for the Mam languages of Guatemala.

In the word by word approach, it is possible to reorder, delete and insert morphemes in the word (in addition to changes in the actual forms of morphemes). These changes may be conditioned by other aspects of the word in which they are carried out. But note: because the program deals with one word at a time, it is not possible to reorder, delete or insert across word boundaries. Nor can a change be conditioned by what is outside of that word. (Actually, there is a minor exception to this, but it is of no importance for our present purpose.)

By contrast, if sentences rather than words are adapted, then it should be possible to reorder, delete and insert based on the syntactic structure, and it should be possible to condition morphological changes by aspects of the sentence outside of the word in which the change is made.

For example, suppose that we wished to adapt between two languages, one of which expressed possession like *John's house*, the other which expressed it as *the house of John*. (Obviously, it would not be possible to adapt between these with a word by word approach.) Nor is it sufficient to simply recognize the categories of the words to make the change, as becomes obvious when we consider cases like the following:

[the king of Oz]'s head
the head of [the king of Oz]

[the greatest nation on earth]'s president
the president of [the greatest nation on earth]

To handle these correctly, the noun phrases within the phrase must be recognized (parsed) and the following change made:

NP1's NP2 <===> the NP2 of NP1

This correspondence has been expressed as a type of rule. But just what rules should be allowed, and how they should be expressed, is an open question. It would be helpful to have many examples of different sorts of correspondences, from a wide range of languages, so that the rule syntax built into the program is sufficiently general to handle all the cases, without being needlessly complex.

Now let us turn to some real examples. We will begin with an example from Quechua. In some dialects, there is a suffix *-yoq* indicating having a property (part, etc.), and another *-ynaq* indicating a lack of some property:

uma-yoq 'having a head'
uma-ynaq 'lacking a head'

Other dialects do not have *-ynaq*, expressing the lack of a property with *mana* 'not' and the construction for having a property:

mana uma-yoq 'not having a head'

The correspondence between two such dialects is as follows:

uma-ynaq < = = > *mana uma-yoq*

As with the English example above, rather than a simple noun like *uma* 'head', we could have an entire noun phrase. Therefore the change must be expressed as:

NP-ynaq < = = > *mana NP-yoq*

mana is inserted before the NP, and *-ynaq* is changed to *-yoq*.

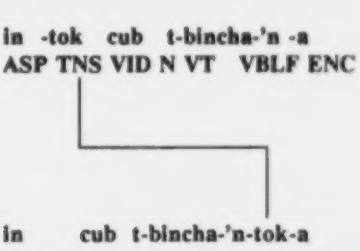
Let's take one more Quechua example: the complement to a phasal verb (such as 'begin', 'continue', or 'finish') is an infinitive object in some dialects but an adverbial clause in others:

DIALECT A	*DIALECT B*
= = = = = = = = = =	= = = = = = = = = =
miku-y-ta qalla-	*miku-r qalla-*
eat-INF-OBJ begin	*eat-ADV begin*

The change is entirely within a single word (*miku-y-ta* versus *miku-r*). However, it must be conditioned by the controlling verb. It only occurs in phasal verbs, so if the controlling verb is *muna-* <to want> the change is inappropriate, and 'want to eat' is *miku-y-ta muna-* in both dialects. So a rule expressing the change requires sensitivity to something outside of the word in which it is effected:

V1-y-ta V2-	< = = >	*V1-r V2-*
+phasal		*+phasal*

Now let us take an example from the Mam branch of Mayan. The following exemplifies a systematic difference between the verb phrase of two dialects:



Consider the tense suffix *-tok*. In one dialect it follows the aspectual particle *in* (something like an auxiliary verb); in a closely related language it is suffixed to the main verb. If the plural marker follows the aspectual particle, it remains, even when the tense marker is moved; compare the following:

in-tok-cye cub t-bincha-'n -a
in -cye cub t-bincha-'n-tok-a

In this case, a suffix is removed from one word and inserted into another. The syntactic structure is necessary to know when the change is appropriate, and into which verb to move *-tok*.

Now let us consider some examples between English and the language most closely related to it, Frisian. English and Frisian diverged more than a milennium ago, but nonetheless, it may be possible to do CADA between them; a word for word conversion of Frisian to English is remarkably intelligible. However, there are many cases where syntactic changes would also help greatly, especially in naturalness.

Frisian maintains more verbal inflection than English, which makes up for the lack of inflection with overt pronouns. Thus, there are correspondences like the following (English < = = > Frisian):

you must < = = > *moatst*

Since the inflected Frisian verb could also be accompanied by a pronoun, the introduction of English *you* should be conditioned by whether it is already present as the result of an overt Frisian pronoun.

Some systematic and very pervasive changes involve word order. For example, in English, when there is an auxiliary, the verb follows it

and is in turn followed by the object. But in Frisian, the main verb is placed at the end of the clause.

English		*Frisian*
= = = = = = = =		= = = = = = = =
SUB AUX V OBJ	< = = >	*SUB AUX OBJ V*

For example (taken from Pieter Meijes Tiersma, *Frisian Reference Grammar,* Dordrecht: Foris, 1985, page 144):

I have seen her. < = = > *Ik ha her sjoen.*
I have her seen

When the auxiliary is complex, things get even more complicated; as for example, in the following:

I will have seen her. < = = > *I sil har syoen hawe.*
I will her seen have

The object in these examples has been the simple pronoun *her* 'her', but it might be a long phrase with considerable internal structure. For example, consider the following (taken the seventh chapter of Genesis of the new Frisian Bible translation, published in 1978 by the Netherlands Bijbelgenootschap):

```
...(moatst ) saŵ  pear,  in mantsje en  syn wyfke, nimme
...(you must) seven pairs, a  male    and his female, take

you must take seven pairs, a male and his female
```

The verb must be moved over the phrase 'seven pairs' and an appositive to it, 'a male and his female.' To make such a change would obviously require recognizing the expression *saŵ pear, in mantsje en syn wyfke* as the noun phrase over which the verb must be moved.

There are other complications. If there are adjuncts to the verb, such as the italicized portions in "I have *recently* seen her" and "I have seen her *this week*," the rule formulated above either fails to apply or applies incorrectly. (This was pointed out to me by Bob Kasper.)

Consequently, the notation for expressing systematic differences between closely related languages must be much richer than that given in the over-simplified examples above. To design a generally adequate notation (and the computer programs that will operationalize it), those of us involved in this project need many, diverse examples.

We now conclude with a list of the criteria for what would constitute a good example:

(1) **It should involve languages sufficiently similar that a CADA approach seems feasible. (This would involve the analysis of source dialect text into its structural parts, but not involving a semantic component as in more ambitious machine translation projects.) An example between two languages as dissimilar as English and Russian would not be useful, but an example between two Romance languages, or between two Germanic language, would be.**

(2) **The correspondence should be fairly frequent, not something that might come up once or twice in ten thousand words, but something, which if changed in an adaptation process would have significant impact on the intelligibility or naturalness of the text.**

(3) **The correspondence must be systematic, in the sense that it will always apply. Of course, it may be conditioned, but the conditions should be statable in absolute terms (as the examples given above). It should not be stylistic in nature, nor conditioned by the rather illusive notions sometimes invoked in discourse studies (for example, "if the noun phrase is highly topical").**

(4) **The example should be submitted with a discussion, explaining the syntactic structures, the identity of the morphemes involved, any conditions on application, etc.**

If you have an example, I would appreciate your sending it to me at the following address:

David Weber
6004 Stanton Ave. A-15
Pittsburgh, PA 15206

* * * * * * * * * * * *

Congratulations to David Weber

New volume Available: *A Grammar of Huallaga (Huanuco) Quechua*, by David John Weber. University of California Publications in Linguistics. Order from: University of California Press, 2120 Berkeley Way, berkeley, CA 94720. 515pp. $52.00 paper.

CONTACT-INDUCED CHANGE IN AUSTRONESIAN LANGUAGES

CHARLES E. GRIMES

What are mechanisms of language change in general? What mechanisms do we find in the Austronesian world that are induced by contact with other languages? And how do the mechanisms we find triggered by contact with other languages require us to rethink the assumptions upon which various comparative methods are based?

These were the questions at the heart of the papers and discussion at the Comparative Austronesian Project Symposium on Contact-Induced Language Change held at the Australian National University, 26 August - 1 September 1989. All of these are issues in Indonesia, whether it be contact between the vernacular and Indonesian or Trade Malay, contact between Austronesian and non-An languages (e.g. Irian Jaya, Halmahera, Kisar, Aru), or contact between the vernacular and a socially dominant language such as Bugis or Makassar in Sulawesi).

1. The Papers. Those presenting papers gathered from Europe, North America, Indonesia, the Pacific, Australia and New Zealand. Several arrived a week or more before the conference to exchange ideas before their presentations.

Case studies were presented with hard data from all corners of the Austronesian speaking world. Topics that play significant roles in ethnolinguistic identity and language maintenance and shift: historical and political events such as local wars, slavery and colonialism on language change; the role of ethnolinguistic vitality; cultural traits such as raiding, exogamous marriage patterns, retention or loss of power tied to place; exoteric vs. esoteric orientation of the culture. Some looked at creolisation and the effects of long-term language contact; lexico-statistics, lexical innovations, lexical retentions, and phonological and syntactic reconstruction.

2. The issues. Several themes kept reoccurring throughout the papers and discussion, and many of these issues were discussed together in a workshop the final day of the symposium.

Each method available to us for comparative and historical studies has built-in theoretical and methodological problems. No single method is good enough to be the sole basis for language classification. Each method needs the corroboration of other methods before we can be content that we have a reasonable, reliable picture. Where different methods give us different pictures further study is needed until the discrepancies can be accounted for.

It is often assumed that while vocabulary and phonology readily adapt when languages are in contact with each other, syntax and morphology remain stable. This assumption turns out to be erroneous when we look at empirical data. Syntax, word order typology, position of adpositions, possessive constructions, basic vocabulary and many other features are all adaptable. There are no parts of language that can be shown not to adapt when languages are in contact. While there are exceptions, it seems that the form of certain affixes (but not their distribution) and functors tend to remain more stable than other parts of language.

Other issues discussed were: the dilemma of identifying incomplete sound changes vs. borrowings; the problem of identifying retentions vs. innovations and the validity of using exclusively shared innovations as a basis for subgrouping; the need for multi-disciplinary understanding (history, archeology, linguistic, anthropological) to explore complex social situations adequately; the role of social factors such as marriage, trade, wars, lingua francaes, taboos, special registers, avoidance behavior, slavery, education, attitudes to foreigners, etc. in fostering or inhibiting language change; the use of dialect information as a basis for diachronic work; the need to reexamine current assumptions about subgrouping, lexicon, phonology, and syntax that are based on unreliable data and unacceptable assumptions from the last 100 years of Austronesian studies.

There was a strong consensus that our greatest need continues to be reliable descriptions (phonologies and grammars) and thorough dictionaries throughout the Austronesian world and also from non-AN languages where there is contact.

3. Publication. The revised papers are to be published by Mouton in their State-of-the-art series. Authors were given three months in which to turn in the final form of their papers for publication. ■

Reviews

The Chinese language: fact and fantasy, John De Francis

Honolulu: University of Hawaii Press. 1984. 330p.

This book can be enjoyed by linguist and layman alike. Its back cover contains statements by sociolinguist Joshua A. Fishman of Yeshiva University to the effect that the volume is "first rate," and by the Sinologist and general linguist William S-Y. Wang of the University of California at Berkeley that this is "a work of great effectiveness." Both of these opinions coincide exactly with my own. De Francis has produced a highly readable and entertaining volume with 15 well organized chapters covering everything from language planning and language policies in China (Chapters 14-15), and language standardization (a complicated issue) to the dialects, regionalects, and idiolects of Chinese. The book is particularly strong on the subject of language reform, which is not surprising given the fact that De Francis has dedicated the volume to "the neglected memory of La Xun as an ardent advocate of Chinese language reform."

The reader will become immediately engrossed in the subject matter by learning about what has been appropriately called "The Singlish Affair," ("Introduction," pp. 1-22). This is the unbelievable (true) story of the World War II Committee on English Language Planning, which was in charge of planning for the eventual incorporation of English-speaking countries into the Japanese Empire and for the forced shift from the Latin alphabet to a system based, presumably, on both the Japanese syllabaries (*katakana* and *hiragana*)as well as the borrowed Chinese (kanji) characters. This committee was dominated by its director, Professor Kanji, who was a close friend of the Supreme Commander of Japan's military forces, General Tojo. The other three members of the committee consisted of a Chinese, a Korean, and a Vietnamese, not coincidentally due to the fact that the Japanese had conquered their respective countries.

The aim of the book, as De Francis explains (p. 20), is to demonstrate that Chinese is not the most efficient universal script. The author

succeeds to convince his audience of this by playing the part of the iconoclast. He shows that there are a number of myths about spoken and written forms of Chinese which have contributed to serious ignorance and misunderstanding, particularly by Westerners.

One of the major myths discussed is the myth covering the ideographic nature of the writing system (Chapter 8, pp. 133-148). De Francis states that Sinologist and non-Sinologists alike have gone astray in the correct interpretation of the facts pertaining to the real nature of Chinese characters because they have overemphasized the pictographic origin of the characters and extrapolated from this that this is true for all the characters up to the present time. As the author puts it (p. 142): "The error of exagerating the pictographic and hence semantic aspect of Chinese characters and minimizing if not totally neglecting the phonetic aspect tends to fix itself very early in the minds of many..., because their first impression of the characters is likely to be gained by being introduced to the Chinese writing system via some of the simplest and most interesting pictographs..." The argument continues (pp. 142-143):

> This may also explain the oversight even of specialists who are aware of the phonetic aspect in Chinese characters, including such able scholars as [Charles] Li and [Sandra] Thompson..., who refer to Chinese writing as 'semantically, rather than phonologically grounded' and consider that a character 'does not convey phonological information except in certain composite logographs where the pronunciation of the composite is similar to one of its component logographs.' It takes a profoundly mesmerized observer to overlook as exceptions the two-thirds of all characters that convey useful phonological information through their component phonetic [sic].

De Francis easily convinces even the most skeptical linguists that it is not possible (p. 144) for a writing system to consist basically of ideograms for one would have to memorize hundreds of thousands of separate symbols which have no bearing on or relationship to phonetic interpretation. The myth of Chinese ideographs or ideograms is put to rest for good as the author writes (p. 145): "Chinese characters represent words (or better, morphemes), not

ideas, and they represent them phonetically, for the most part, as do all real writing systems..."

I wish to comment in my concluding remarks on two other important linguistic aspects relevant to our understanding of Chinese, the first discussed in several places but chiefly in Chapter 3 (especially pp. 53-58), and the second not discussed, unfortunately, at all. There can be not doubt that China is unique in the contemporary world in the sense that there are really many different language all being called Chinese today. Yes, there are some parallels of this state of affairs to Arabic, yet the Arabs, on the whole, have religion to unite them while having at the same time also many political countries. The Chinese do not have the parallel religious heritage that the Arabs do yet have one country (I ignore the relatively small populations of Hong Kong, which will anyhow become part of the People's Republic of China in 1997, and the Republic of China [Taiwan].) De Francis is correct to point out (p. 54) that "in English, the varieties of spoken Chinese are usually referred to as 'dialects'," despite Leonard Bloomfield's pronouncement in **Language** (1933:44) that Chinese consists of "a variety of mutually unintelligible languages." De Francis, however, ultimately disagrees with this point of view arguing (p. 55) that "it involves some danger because in the popular mind (and often in actual fact) much more than merely linguistic differences separate entities comprising different languages."

One of the most provocative books, in my opinion, to come out in the past decade in Chinese linguistics is Bloom (1981), which claims that since Chinese allegedly does not contain counterfactuals, Chinese "thinking" must be radically different from English thinking (of course this gets us necessarily involved in the Whorfian hypothesis). The implicit assumption is that since there is no linguistic counterfactual formulation in Chinese, the Chinese do not "think" counterfactually, and since counterfactual thinking is one of the prerequisites to (at least our Western idea of) argumentation, the Chinese must (in some sense, at least) be rather "poor" at it. However, Kuang-ming (1987:87) reminds us that the "Chinese people express their counterfactual thinking in the same way that they express plurality, gender, and time, that is, implicitly and pervasively by way of context and expression in each case" and (ibid.) "except for sentences with *wei*, every counterfactual *sentence* could be read as a

simple hypothetical, were it not for the context specifying that this particular sentence should be read counterfactually."

De Francis has spent more than half a century studying Chinese, including years living and traveling to China, producing over 24 books and hundreds of articles and reviews in this and related fields. This book could have contained a profitable series of chapters on the Chinese "language and thought" subject matter of Bloom (1981) and Kuang-ming (1987), which I (and, in all likelihood, most linguists) find particularly fascinating. Perhaps the author could be persuaded to produce a second edition of this book with his own thoughts on this particular subject. Certainly very few would command his background and experience to offer penetrating insights.

The field of linguistics surely could use similar books to this one for all of the world's languages, major and minor, a worthwhile project which some publisher should explore and undertake.

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BIBLIOGRAPHY

Bloom, Alfred H. 1981. Counterfactuals, universals, and Chinese thinking--A review of the linguistic shaping of thought: A study in the impact of language on thinking in China and the West. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Kuang-ming, Wu. 1987. Review of Bloom (1981) in Philosophy East and West 37:84-94.

L'Articulation du temps et de l'aspect dans le discours toura, Thomas Bearth. Sciences pour la communication, 14. Berne: Lang 1986, 353pp.

Bearth studied the Toura language, spoken on the Ivory Coast by approximately 25,000 people in an isolated, mountainous area bordered by the Sassandra river. The Toura people have maintained a strong traditional base of ancestral customs which is perhaps now being eroded by the penetration of the media and schools on the one hand and economic change and a rural exodus on the other hand. He

classifies Toura as part of the Niger-Congolese branch of the phylum Congo-Kordofanien (Greenberg 1963), General characteristics of Toura are that it is an example of an "economical" (Houis 1977) language with a strong tendency toward monosyllablism. There is a high degree of osmosis in grammatical categories and in principal any lexeme could function as a noun. This combines with very extended exploitation of tonal variation.

Bearth states that the field linguist must often choose between an empirical description devoid of sufficient theoretical base (outside of hierarchical structure) and a discourse analysis approach which avoids direct empirical quantification. In his analysis of Toura, Bearth takes a discourse analysis approach to the narrative genre, based heavily on the work of Pike and Grimes, but hopes to add some "missing pieces" (p.7). In particular he stresses the need for empirical validation growing out of verifiable description. The control of variables linked to dialect and register is addressed, as are the adequacy of descriptive methods. He also discusses the wisdom of studying monologue when dialogue is generally considered more primary, although he points out that dialogue is present, although subordinate, in narrative forms. Nor does Bearth ignore the importance of socio-culture context and pragmatics.

Bearth seeks to contribute to a grammar of discourse, therefore he formalizes relations between propositions, revealing a sequential syntax, explained as a sort of algorithm of varying complexity having closure properties corresponding to those of the constituents of the text. (This seems to be based on relational grammar.) He states that aspect and mood are related to the situation (e.g. subject and time), and that thee is a fundamental disjunction between enunciation and reference. He asserts that it is the redundant elements which furnish the key to constituent operations within discourse, at least when dealing with oral texts of Western African origin.

The 278 page text is well documented with examples from Toura and with diagrams to explain the relations. There are also references to the work of other linguists. Notes and appendices take up another 37 pages. The book maintains at all times a concern for the work and the problems of the field linguist.

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Notes On Linguistics

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CONTENTS

COOORDINATOR'S CORNER Eugene Loos..... 3

ARTICLES

IDIOM DISCOVERY PROCEDURE Darryl Wilson..... 4

READABLE TECHNICAL PARAGRAPHS Charles Peck..... 7

A TYPOLOGY OF CAUSATIVES, PRAGMATICALLY SPEAKING Nancy Bishop..... 31

USING FIESTA TO FIND THE CONTEXT FOR WORDS IN A LIST Eugene Loos & Dan Tutton..... 43

INSTEAD OF THE CULT OF PERSONALITY... Derek Bickerton..... 47

ANOTHER LANGUAGE LEARNING GAUGE Harriet Hill..... 51

ANNOUNCEMENTS and REPORTS

BOSTON U. CONFERENCE ON LANGUAGE DEVELOPMENT 42

LINGUISTIC ASSOCIATION OF THE SOUTHWEST (CALL FOR PAPERS) 50

REPORT ON THE CUSHITA CONFERENCE George Payton..... 56

HELP FOR MSWORD USERS 67

REVIEWS

A DICTIONARY OF SELECTED SYNONYMS IN THE PRINCIPAL INDO-EUROPEAN LANGUAGES, by Darling Buck Alan S. Kaye..... 57

WORDS IN THE MIND: AN INTRODUCTION TO THE MENTAL LEXICON, by Jean Aitchison Ken McDaniel and Alan S. Kaye..... 59

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COORDINATOR'S CORNER

Figures of speech can be elusive. Basic SIL training does not give much attention to their analysis, yet idioms constitute an important area for anyone wishing to gain a mastery of a new language. Darryl Wilson's "Idiom Discovery Procedure" is therefore a welcome contribution. Coming from experience that has benefitted him, it is very simple to apply.

Perhaps some day we will see a volume dedicated to the art of linguistic argumentation. Such a volume might contain a chapter on linking sentences together with consideration for the reader's reading process. Charles Peck's "Readable Technical Paragraphs" is a possible candidate for such a volume: it is more than a set of "how to" rules for making a readable article. His development and application of the concept of "promising" provides a way to scrutinize the role of each sentence in a paragraph to make each one fulfill its role in the argument. I found the article both readable and helpful.

Determining what usages speakers and listeners make of their expressions during language processing is an important part of pragmatics. Nancy Bishop's article, "A Typology of Causatives, Pragmatically Speaking", is an indicator that some linguistic claims about structure will need revision if we include in our typology an account of how sentences are used.

I was impressed with Dan Tutton's use of FIESTA to make a quick extraction of information to be used as grist for a dictionary. We expected him to come up with a few hundred examples, but his process produced more than a megabyte of data, a rich haul, beautifully displayed on screen. Don't let the details of the explanation make the process seem to be complex.

Derek Bickerton's article, "Instead of the Cult of Personality", focuses on the plight of the speakers of creole languages, but the perceptive reader will see that the ethical principles that motivated him to write it are equally applicable to any minority language. In this day of concern in many sectors for the study and preservation of the form of language, it was refreshing to find this eloquent expression of concern for people. The article helps elevate applied linguistics above the status of an inferior academic pursuit.

Do we really need new viewpoints on how to measure our progress in language acquisition? How about one that is not only new but which can also be encouraging? Harriet Hill in "Another Language Learning Guage" contributes an evaluation metric that is adapted to your own situation.

--EL

Idiom Discovery Procedure

DARRYL WILSON

Would you like to discover idiomatic expressions in the language you are studying at the rate of 30 per hour? Read on!

This article is a testimonial to the effectiveness of an idiom discovery method which many SIL teams seem to be unaware of. I would like to call this method to the attention of others by summarizing the results which I personally attained by using the method, and by referring the reader to the work done on idioms by our SIL colleague, D.A. McElhanon.

I am indebted to K. A. McElhanon for the ideas which resulted in the instruments I used to study idioms in Suena and Zia of Papua New Guinea. In recent years I have presented this method to my linguistics classes at the International Linguistics Center in Dallas under the title, 'Idiom Discovery Procedure'. The following is a brief description of the method.

The instrument consists of a chart. On one axis the investigator lists body parts or human faculties and on the other axis are listed predications about them normally verbs and modifiers which have earlier been found to occur in idiomatic expressions. The choice of nouns and verbs is not crucial at first, as non-productive items can be deleted and others can be added as the investigator centers in on those which are most productive of idiomatic expressions. I suggest the initial chart consist of 25 body parts and 25 verbs and adjectives. McElhanon (personal communication) reports that he used 'any body part which occurred in a so-called idiom plus all the predications which could be made (some 300) which included adjectives and verbs.'

The resultant chart serves only as a guide for the elicitation procedure. It forces the investigator to examine each possibility. It also helps the language assistant to see what the investigator is doing. Those combinations which result in an idiomatic expression can be marked on the chart with an 'I', those which have a literal meaning

with an 'L', and those with an extended or secondary meaning with an 'S'. The actual resultant forms and their explanations will be written elsewhere. A word of *caution*: The investigator will do well to have a tape recorder running to catch all of the nuances and sudden insights revealed by the language assistant. The language assistant should be encouraged to take his time to reflect on each question, as it is possible to discover further idioms through slight adjustments of the items. For example, in English the combination 'keep skin' might suggest 'saved his own skin'.

The investigator should also check for the reverse sequence. For example: 'back + off' may only bring to mind 'back off', which is a literal meaning. But when the items are reversed to 'off + back' they suggest 'get off my back'.

I am aware that in trying to elicit idioms in this way there is the danger of forcing unnatural speech patterns. The use of two or more Language Assistants helps to confirm the naturalness of the idioms discovered.

The following chart of well-known English idioms is meant only as an example:

IDIOM DISCOVERY PROCEDURE CHART

	head	*heart*	*hand*	*nose*
lose	I	I		
keep	I	I		I
big	I	I		
heavy	I	I	I	
soft		I		
hard	I	I		I
clean		I	I	
red			I	
on	I	I		
off	I		I	
under			I	

The following may be considered 'pre-requisites' for investigating idiomatic expressions:

1. Fluency in the language under investigation.
2. A Language Assistant who can give examples of usage.
3. A chart as described above.

A final word of encouragement to anyone who might consider using this method. In my initial study of Suena idioms in 1975, I used a chart with 20 body parts and 27 verbal elements (the infinitive in Suena also functions as an adjective). Of the 540 possible combinations, 257 proved to be figurative. Later, in 1981, for my study of idioms in Zia, I constructed a chart with 17 body parts and body faculties across the top and 22 verbs and attributes down the left margin. Of the 374 possible combinations, 138 reminded the language assistants of either an idiom (58 total) or a secondary meaning (80 total). Thus in approximately 4 hours time, I was able to discover 135 figurative expressions. I estimate that it would have taken me 30 years of passive listening to discover an equal amount of idioms in the course of everyday conversation.

This article is meant only as a practical guide and hence it has not gone into the definition or theoretical questions concerning idioms. Those who wish to pursue those aspects are referred to the following articles by K. A. McElhanon:

McElhanon, K.A. 1975. Idiomaticity in a Papuan (non-Austronesian) language. *KIVUNG* 8 (2). 103-44.

---. 1978a. Body image idioms in Irianese and Papua New Guinean languages. *IRIAN* 6 (3). 3-27.

---. 1978b. On the origin of body image idioms in Tok Pisin. *KIVUNG* 11 (1). 3-25. ■

Readable Technical Paragraphs

CHARLES PECK

A. Grammatical cohesion
B. Topic-properties of formulaic sentences
C. Promises in sentences
D. Questions from sentences

INTRODUCTION

Linguistics papers can be made more readable if the authors will pay attention to paragraph cohesion.[1]

The main component of paragraph cohesion is giving each paragraph one main topic and then reflecting that paragraph topic in the beginning of each sentence in that paragraph.

The first part of this paper deals with a rather mechanical way to look at paragraph topic coherence. Then, there are two final ideas about promises (my own) and questions (Gray, 1977), which are ways to check the semantic or discourse cohesion of a paragraph.

Much more goes into writing a report than what will be discussed in this paper. But the ideas here presented are useful supplementary **rules of thumb** to help those of us who need such help.

A. GRAMMATICAL COHESION IN PARAGRAPHS

1. Heads and bodies of sentences

We will divide sentences into "heads" and "bodies"[2] in a rather mechanical manner. Our general rule will be:

> **The "head" is everything in a sentence up to the first finite verb in a subordinate or a main clause, disregarding the verbs in formulaic structures such as quotation formulas, cleft introducers, existential introducers and such. The "body" is the rest of the sentence.**

The "heads" and "bodies" of the following sentences will help explain this principle.

The following three examples show the head-body division made before the finite verb in a preposed dependent clause:

HEAD	BODY
Although the determiner	*is optional, it almost always occurs when the phrase is embedded.*
HEAD	BODY
When the subject of a clause	*is permuted to sentence initial position, the verb in the predicate must have an emphatic suffix added to it.*
HEAD	BODY
If the subject of clause	*is expounded by a third-person plural inanimate noun, the verb expounding the predicate must have a third-person singular prefix.*

The following two sentences show the head-body division made before the finite verb in an independent clause:

HEAD	BODY
In English, the theme	*is usually in the first part of a sentence.*

HEAD	BODY
The cognitive primacy of grammatical subjects undoubtedly	*contributes to the special status of subjects in various linguistic processes.*

The following three sentences show the head-body division made before the finite verb following a quotation or quotation-like formula:

HEAD	BODY
We have already pointed out that the theme	*precedes the rheme in a sentence in English.*
HEAD	BODY
We have seen that the use of "gi"	*is parallel to that of "cu".*
HEAD	BODY
Smith says that the "Twaa" language	*descended, historically, from the "Nifual" language.*

The following two examples shows the head-body division made before the finite verb following the first part of a cleft sentence:

HEAD	BODY
It is questionable whether this theory	*would apply to other languages.*
HEAD	BODY
It is the possibility of increasing the green-house effect that	*is making some policy makers rethink the use of atomic power.*

The following example shows the head-body division made before the finite verb following the existential part of an existential sentence:

HEAD	BODY
There is another interpretation of these data, but the following	*seems to be the most satisfying.*

There is nothing theoretical about the head-body division posited above. These division rules are the result of several years of

observation and cogitation. So far as I know, the rules apply only to English.

The division between the head and body might not be a sharp break. It might be a rather fuzzy boundary. A sentence with its cohesive material placed near the end of the head might not be much easier to read than a sentence with cohesive material placed early in the body.

2. Paragraph topic maintenance

Now, the principle of paragraph cohesion (in English) requires that the HEAD of each sentence of a paragraph must mention the topic(s) of the paragraph, in one way or another. In other words, be sure each sentence is talking about the same topic. The BODIES should develop the thoughts of the paragraph. As an example, let us use an explanatory paragraph given in Peck (1984).

HEAD	BODY
Another reason some managers	*fail to go up the ladder is their failure to learn to delegate authority.*
As effective young managers, they	*learned to get things done by their own efforts.*
They	*had their fingers on all the departments under them and were personally responsible for success or failure.*
But as a manager	*gets promoted he reaches a level where he must change and learn to delegate responsibility.*
He	*must promote a team effort among the managers under him.*
Now, if he	*meddles at some lower level he is not just meddling in a department, he is meddling in another manager's work, and that causes real problems.*
If a manager	*is to continue up the ladder of promotion, he has to make a radical shift in the way he works, and, unfortunately, some fail to make the change.*

Note how the paragraph topic *managers* is mentioned in every HEAD, although sometimes by pronouns. Because the paragraph topic is kept in view in every sentence, this paragraph should be easier to read than one which did not keep the paragraph topic in view.

As an example of how a different paragraph does not follow this principle, consider the following:

> *An interesting phenomenon occurs when the free form of a noun becomes different from its corresponding bound form. Many languages, especially some in Northeastern Australia, replace free nouns whenever someone with a phonetically similar name dies, and it is tabu to say the noun. Typically, the free nouns are replaced by a borrowed word, but the bound or predicate-incorporated forms are not replaced. The result is that there is a low phonetic match between the free nouns and the incorporated, bound, forms. Then people forget the original connection and begin to use the incorporated form as sort of an aspect marker on the verb in a sentence that also includes the free form.*

The paragraph above is hard to read because each sentence seems to have a different topic or orientation. If it were to be read aloud, a skillful reader would put proper stresses and pauses to make the paragraph understandable. But for silent reading, it contains impediments to rapid reading. To see why the paragraph is difficult, consider the following diagram of the sentence heads.

HEAD	BODY
An interesting phenomenon	*occurs when the free form of a noun becomes different from its corresponding bound form.*
Many languages, especially some in Northeastern Australia,	*replace free nouns whenever someone with a phonetically similar name dies, and it is tabu to say the noun.*
Typically, the free nouns	*are replaced by a borrowed word but the bound or predicate-incorporated forms are not replaced.*
The result	*is that there is a low phonetic match between the free nouns and the incorporated, bound, forms.*

Then people	*forget the original connection and begin to use the incorporated form as sort of an aspect marker on the verb in a sentence that also includes the free form.*

Now consider one possible reworking of the paragraph:

> *When the free form and the verb-incorporated form of a noun become different from each other, people may begin to use both forms in one clause. This happens when the free form of a noun in certain languages (for example, some languages of Northeastern Australia) is replaced by a borrowed noun to avoid pronouncing the noun because it is phonetically similar to the name of a person who has recently died. A synonymous noun from a neighboring language fills the void. The free forms are changed while the incorporated forms usually are not. Thus the free and bound forms come to have very different phonetic shapes. After the forms have been different from each other for some time, people forget the original connection and begin to use both forms in a single clause. The bound form becomes sort of a verbal aspect marker that agrees with the free noun in the clause. An example might be: "I-will-spear-make a new spear for my son.", where the incorporated word for "spear" has one form and the free occurance of "spear" has a different form, because they were borrowed at different times.*

This paragraph is more readable. The reason why may be seen in the diagram below. *Bound form* or *free form* is mentioned early in each sentence:

HEAD	BODY
When the free form and the verb-incorporated form of a noun	*become different from each other, people may begin to use both forms in one clause.*
This happens when the free form of a noun in certain languages (for example, some languages of Northeastern Australia)	*is replaced by a borrowed noun to avoid pronouncing the noun because it is phonetically similar to the name of a person who has recently died.*
The free forms	*are changed while the incorporated forms usually are not.*

Thus the free and bound forms	*come to have very different phonetic shapes.*
After the forms	*have been different from each other for some time, people forget the original connection and begin to use both forms in a single clause.*
The bound form	*becomes sort of a verbal aspect marker that agrees with the free noun in the clause.*
An example	*might be: "I-will-spear-make a new spear for my son.", where the incorporated word for "spear" has one form, and the free occurance of "spear" has a different form, because they were borrowed at different times.*

Good technical writing involves keeping the paragraph topic in view, not adding distracting material, and still making creative choices at every point.

3. Other problems with sentences in paragraphs

Sometimes, you may encounter *topic chaining*, in which each sentence takes its topic from the preceding sentence.

> *Sentences are classified by the conjunctions that they use. The conjunctions may or may not be complex. The complexity consists of combinations of morphemes, some of which are conjunctions and some of which are not, such as "in order to" and "nevertheless." In the case of "nevertheless" we have three non-conjunctive morphemes that have been combined into a single idiomatic conjunction or sentence introducer.*

HEAD	BODY
Sentences	*are classified ... conjunctions ...*
The conjunctions	*may be ... complex ...*
The complexity	*consists of ... "nevertheless".*
In the case of "nevertheless" we	*have.*

This style seems to be all right for speaking and for slow reading, but it is not good for rapid reading. It will bother some people more than others, depending upon their reading habits.

So, try to avoid such sentence chaining in your writing.

Sometimes, topic chaining reflects embedding of paragraphs, such as in the following:

> *This book on world poverty gives a graphic view of poverty around the world. The author seems to have visited and studied many poor people in many countries. The book discusses the historic reasons for poverty, how the colonial rulers condemned some people to poverty and how postcolonial governments continued in the same policies. It also discusses what it is that keeps poor people poor in todays world, such as the inexorable population growth among the poor.*

HEAD	BODY
This book on world poverty	*gives ...*
The author	*seems to have visited ...*
The book	*discusses ...*
It	*also discusses ...*

If we make an outline of the paragraph, it would be:

Explanatory Paragraph =

Text: *Explanatory Paragraph* =

Text: *This book on world poverty gives a graphic view of poverty around the world.*

Expo: *The author seems to have visited and studied many poor people in many countries.*

Expo: *The book discusses the historic reasons for poverty, how the colonial rulers condemned some people to poverty and how post-colonial governments continued in the same policies.*

Expo: *It also discusses what it is that keeps poor people poor in today's world, such as the inexorable population growth among the poor.*

Based on the paragraph structure, the HEAD of the second sentence seems to be all right, because it introduces the explanatory sentence of an embedded paragraph. However, this HEAD is noncohesive over all, therefore it is an obstacle to rapid reading. So, even embedded paragraphs probably should adhere to the rule of topic cohesion.

4. The HEADS and BODIES in existential sentences

Existential sentences present special problems in assigning their heads and bodies.

For existential clauses, it seems best to say that the HEAD will be everything up to any nonrestrictive modifier of the item whose existence is stated. A nonrestrictive modifier is one that does not help identify the item, but instead, gives added information.

HEAD

There is something I need to talk to you about.

HEAD

There is no end to learning another language.

Note that the examples above have no nonrestrictive modifiers or any added clauses, so they have no BODIES.

HEAD	BODY
There is a problem with your analysis,	*as Printz has already brought out in his book.*
HEAD	BODY
There are several particles in the language that we still have not analyzed	*but we want to work on them in the next workshop.*
HEAD	BODY
There was an old woman in the village who still knew all the old women's songs,	*so we recorded all the songs she could remember.*

HEAD	BODY
There are lots of opportunities in business	*for qualified young people.*
HEAD	BODY
There is also a variety of ill-intentioned spirits	*who may be used by witches or vengeful people.*

The following example shows an existential clause with a proposed sentence introducing phrase. Here, the theme of the sentence may be "texts" or "change in verbal aspect". So the HEAD may be drawn after "texts" or after "aspect."

HEAD	(BODY)
In some texts,	*however, there is a more dramatic change*
	(BODY)
in the verbal aspect,	*as when the narrator changes from completed aspect to continuous aspect in the peak episode of a story.*

Note how the first existential clause above is similar to a corresponding cleft sentence, the chief difference being that the noun phrase in the existential clause must be indefinite, "a problem...", while the cleft sentence requires a definite noun phrase in the corresponding slot, "the problem ... ":

HEAD	BODY
It is the problem with your analysis,	*that Printz has already brought out.*

5. Long sentence heads

Some people use sentences with combinations of formulaic introductions to a sentence, which makes the sentence hard to follow in rapid reading.

HEAD	BODY
It is obvious now that we can conclude that there are some points of contact that	*will allow us to open some channels of communication.*

Such a sentence introduction as in the sentence above has too much wordage in its HEAD, and, hence, does not make a good sentence to use inside a paragraph.

Sometimes we want to add so much to the subject of a clause, using postposed modifiers and relative clauses, that the noun head of the subject phrase is separated by many words from its predicate. When the separation exceeds eight words or so, there can be a break in the train of thought of the passage.

HEAD	BODY
The situation in which one makes a speech, depending as it does on the place, the audience, the formality of the occasion, the time of day, week and year, and the assigned topic	*is very culturally conditioned.*

6. Summary

We have seen how quote formulas, cleft formulas and existential formulas add noise to a paragraph. Also, added verbiage between the subject noun of a clause and the predicate produces breaks in the train of thought.

B. TOPIC-PROPERTIES OF FORMULAIC SENTENCES

The topic sentence should be constructed in such a way that the paragraph topic is clear. I encountered one paragraph in which the paragraph topic was buried in the text sentence, and I had to read the paragraph several times to understand it. The topic sentence was something like:

> *Now, the other side of the argument, which some have called the argument from nature, or Schmidt's argument, takes a different approach and uses different evidence.*

The paragraph topic was *Schmidt*, which was buried as the possessor of a noun which is in apposition to a previous noun which is the object of a verb in a relative clause. A better topic sentence would have been:

> *Now we turn to the argument that Professor Schmidt, of the University of Brasof, put forth in 1957.*

or

> *Prof. Schmidt (1957) advanced a different argument, which some have called "the argument from nature".*

These sentences put the professor in emphatic positions where he is available as a paragraph topic.

The three positions of prominence in an English sentence are, in decreasing degrees of prominence, 1) sentence initial or subject of the first independent clause, 2) sentence medial as the object of the first clause or as subject of some non-initial independent clause, and 3) sentence final but not in a subordinate clause. Any one of these positions should give the paragraph topic adequate prominence.

1. Existential clauses as topic sentences

Existential clauses and cleft-structure sentences have special features about them that make them good text sentences but unacceptable non-text sentences.

An existential clause announces a new topic with no necessary cohesion with the previous context. When someone announces, *There*

are some ants in my kitchen. it does not presuppose any previous topic of conversation or discussion, but it does set up a new topic. Note, too, how an existential clause prefers an indefinite noun phrase in its subject. (Indefinite noun phrases are a common way to introduce topics in English.)

> *There is some new evidence that we need to consider.*
>
> *There is an answer to Clemson's question, but it is not easy to understand.*

Writers often use an existential clause in the body of a paragraph and put cohesive material in the relative clauses modifying the noun phrase in the subject of the existential clause, as in the third sentence in the following example.

> *They report that their language has several verbs for movement or traveling, such as go and come. "Go" is subdivided into three common verbs: "go upstream," "go downstream," and "go away from the stream." There are also some other little-used verbs that also translate "go." They are "go in anger," "go secretly," and "go slowly in stages." Note that several of these are compound verb stems.*

They report that their language	*has several verbs ...*
"Go"	*is subdivided into ...*
There are also some other little-used verbs that also translate "go".	
They	*are ...*
Note that several of these	*are composed ...*

Note how the third sentence is an existential clause, but has cohesive material in the post-modifier relative clause. But note also how the postponing of the mention of the paragraph topic weakens its prominence.

But, on the other hand, an existential clause does make a good topic sentence because of the prominence it gives to its subject.

2. Pseudocleft sentences as topic sentences

Pseudocleft sentences (wh-cleft sentences) do require some coherence with the previous context in their pseudo-questions, and failure to provide such cohesion is to make a break in the train of thought (see Prince, 1978).

HEAD	BODY
What all the evidence points to	*is that no simple rule can describe all that is going on.*

HEAD	BODY
What the investigators did not consider	*is that human memory of an event is also influenced by the novelty of the event.*

Note how the pseudo-questions *"what the evidence all points to"* and *"what the investigators did not consider"* presuppose that you have been talking about the *"evidence"* and the *"investigator's conclusions"*. The pseudo-question of a pseudocleft sentence make very strong demands for cohesion with previous context, verbal or nonverbal.

But note also how much prominence the pseudo-cleft sentences give to their pseudo-answers. The pseudo-answers sort of promise that you will continue talking about what they signify. The first pseudo-cleft sentence above promises the reader that you are going to talk about the failure of simple rules or the construction of a complex rule. The second sentence promises a discussion of the role of novelty in memory of events. For these reasons, pseudocleft sentences make good text sentences, but rather disruptive paragraph-medial sentences. (They do not make good discourse-initial sentences, either, because of their dependence on previous context.)

Sometimes pseudo-cleft sentences can be used to wind up and conclude a very theoretical, tightly reasoned paragraph, such as the following:

> *Just how the construction is derived and how it passes through the well-formedness filters need not concern us, here. What does concern us is that the pronoun in the second constituent must not be deleted.*

The sequence above would make a good beginning or a good end of a paragraph, and a good writer might be able to use it inside a paragraph without hindering the readability of the paragraph.

3. Cleft sentences as topic sentences

Cleft sentences have the structure "*It be* pseudo-answer *that/which* pseudo-question." The cleft sentence is very similar to the existential clause, both in its structure and in its relative dependence on context. In general, the cleft sentence does not require much cohesion with its previous context, but such cohesion can be included in either the first part or the second part of the sentence.

HEAD	(BODY)
It is the unexpected parallel features in these languages that	*point to some genetic relationship (or a borrowing) among the languages.*

In the example above, if the preceding discourse has been about *"parallel features"* before the sentence occurs, then the first part of the sentence is the HEAD and the second part is the BODY. However, if the discourse has been about *"genetic relationships"*, then the second part is the HEAD and the first part would be the BODY. But in the latter case, the BODY should not precede the HEAD, so we will call the whole sentence HEAD and have no BODY at all. Thus the BODY label is parenthesized when the sentence is given in isolation.

Prince called cleft sentences **It-cleft** sentences and divided them into two classes. One class is **stressed focus** or **prominent cleft-answer** (in my terms) and the other is the **informative-presupposition** or **prominent cleft-question**.

In our system (Peck, 1984), all the evaluation-cleft sentences fall into her **informative-presupposition** class. Most of our cleft sentences would fall into her **stressed focus** class. A few of our cleft sentences, those with rather vacuous cleft-answers, fall into her **informative-presupposition** class.

Here is a stressed-focus **prominent-cleft-answer** sentence:

STRESSED FOCUS	PRESUPPOSITION
It is the embedded sentence that	*we are most interested in.*

STRESSED FOCUS	PRESUPPOSITION
It was the cycles of transformations that	*Jones objected to.*

And here are some informative-presupposition **prominent cleft question** sentences:

FOCUS	INFORMATIVE PRESUPPOSITION
It was just last year that	*our volume on noun phrases in various languages was published.*
FOCUS	INFORMATIVE PRESUPPOSITION
It is their derivation that	*we are questioning and proposing alternatives to.*
FOCUS	INFORMATIVE PRESUPPOSITION
It is regrettable that	*they chose to leave their positions in the university and to try to market their invention by themselves.*
FOCUS	INFORMATIVE PRESUPPOSITION
It was surprising that	*they figured out a way to solve the problem so soon.*

The last two examples above are **evaluation-cleft** sentences.

Prince discusses how, in her **informative-presupposition** cleft sentence, the presupposition, our **cleft-question** (Peck, 1983) and **evaluation-proposition**, sort of tell the reader that he or she should already know the presuppositional material, and that the writer is just reminding them of something they already know. The presupposition on the part of the writer is quite often very attenuated in technical writing.

Cleft sentences, like existential clauses, make better text sentences than medial sentences. When used as medial sentences they need extra care to tie them into the previous context.

I encountered one article that used many cleft-structure sentences throughout the article. Here is a sample paragraph similar to one in that article:

> *It is the position of the adverb that gives it its prominence. Coming at the end of the sentence, as it does, it is the last major item of the sentence. It is clear that such a position gives whatever is there some added prominence. It is also clear that sentence adverbs that occur there are given more prominence than they would have in their normal position. Hence, it is when adverbs occur sentence-final that they become a major part of the "comment" of that sentence.*

The diagram below will show all the cleft structures in the paragraph above:

HEAD	BODY
It is the position of the adverb that	*gives it its prominence.*
Coming at the end of the sentence, as it	*does, it is the last major item of the sentence.*
It is clear that such a position	*gives whatever is there some added prominence.*
It is also clear that sentence adverbs that occur there	*are given more prominence than they would have in their normal position.*
Hence, it is when adverbs occur sentence-final that they	*become a major part of the "comment" of that sentence.*

I hope you noticed the *noisiness* of the paragraph, how the message is there, but there are a lot of extra words that do not add much except *noise.*

C. PROMISES IN SENTENCES

In a paragraph, the initial one or two sentences make certain promises to the reader about what the paragraph is going to be about, and our job is to fulfill those promises.[3]

The promises concern three aspects of a paragraph: 1) The text sentence promises what the topic of the paragraph will be. 2) The text sentence sets the stance and attitude of the paragraph. And 3) The text sentence sets the style of the paragraph. Hence, as you compose or edit a paragraph, look at the promises made early in the paragraph and at how they are sustained and fulfilled.

For example, consider the initial sentence from the sample paragraph that was used in Section A.2 above.

1. *Another reason some managers fail to go up the ladder is their failure to learn to delegate authority.*

What does this sentence promise? First, it promises a discussion of *managers*, of *managers failing to go up the ladder*, of *managers failing to learn to delegate authority*, and of *something should be done about the problem*. Secondly, it promises that this paragraph is to be a non-emotional description of a problem. And thirdly, it promises modern, sober, journal-level English.

Are the promises somehow ranked? Are some promises more salient than others? The answers to these questions are beyond my expertise and may have to await more work by other people. But for the purposes of this paper, when one writes or edits a paragraph, a look at the promises made is a way to improve the paragraph.

Now look at the second sentence:

2. *As effective young managers, they learned to get things done by their own efforts.*

This sentence is still talking about managers but now they are "*effective young managers*" and they "*get things done by their own efforts*". This sentence fulfills only the first promise of sentence one, namely, the promise to talk about managers. Because it fulfills so few promises, we feel that either this sentence is beginning an embedded paragraph or the paragraph is not very cohesive.

As a new initial sentence, this second sentence promises a discussion of young managers and their ways.

Now look at the third sentence:

3. *They had their fingers on all the departments under them and were personally responsible for their success or failure.*

The sentence has a pronoun subject, so we have the same young managers in view. So this sentence fulfills the promise of sentence two, and the next sentence may continue this fulfillment or make some new promises.

Sentence four is:

4. *But as a manager gets promoted, he reaches a level where he must change and learn to delegate responsibility.*

Here, the *"but"* signals that something contrastive is coming. The singular *"manager"* is mentioned in a noun phrase, so we have a new subtopic. The *"must change"* continues the contrast and the *"learn to delegate responsibility"* harks back to sentence one. Perhaps this contrast is bringing us back to the promises of sentence one.

Sentence four promises a discussion of the change or a discussion of delegating authority.

5. *He must promote a team effort among the managers under him.*

Sentence five has a pronoun subject so we have the same subject as sentence four had. Sentence five talks about *"team effort"*, and we are called upon to exercise our knowledge of the world to see that *"delegating responsibility"* and *"promoting team effort"* are somehow the same. If we fail to make the connection, sentence five will be seen as promising a new discussion, which it does not.

6. *Now if he meddles at some lower level he is not just meddling in a department, he is meddling in another manager's work, and that causes real problems.*

Sentence six begins with a conditional clause that talks about *"meddling"* in the work of his subordinates. Here again, we are called upon to understand that *"meddling"* here harks back to what the

young managers were doing in sentences two and three. If we fail to see the connection, the paragraph will be less cohesive for us.

The result, in sentence six, of meddling is troubles and problems, harking back to sentence one. So sentence six goes with sentences four and five and also fulfills some of the promises of sentence one.

Sentence six may promise a discussion of meddling or of the problems with interfering, but we are so far along in the paragraph that we feel that these promises are of low status.

Sentence seven is:

7. *If a manager is to continue up the ladder of promotion, he has to make a radical shift in the way he works, and some fail to make the change.*

Sentence seven repeats *"up the ladder"* from sentence one, and the *"radical shift"* repeats the *change* of sentence four. The second main clause of sentence seven says that *"some managers fail"*, harking back again to sentence one. As a terminating sentence, sentence seven ends the paragraph neatly.

Now if we look back on the paragraph we see that the shift in sentence four is clear enough, but that the shift in sentence two is weak. Perhaps we could improve it by starting sentence two with *"earlier in their careers, as effective young ..."* Or perhaps you can see a better transition.

The important point here is that if you have a sentence that does not fulfill the promises of the preceding sentence, then you must signal that shift with sufficient introductory material.

Also, as we look back at the promises of the initial sentence of the paragraph, we see that the promise of some discussion of *what to do about the problem* has not been fulfilled. It is left over for the next paragraph or for some paragraph after that. But the discourse will feel incomplete if it does not eventually fulfill that promise.

D. QUESTIONS FROM SENTENCES

Gray (1977, chapter 7) approaches expository paragraphs in a slightly different way. He would look at each sentence in our sample paragraph and ask *What questions does this sentence raise in the reader's mind?* or *What questions would a reader want to ask the writer at the end of this sentence?* Instead of promises, Gray sees questions. He believes that dialogue is basic to interpersonal communication and that monologue is only a distortion of dialogue. In a monologue, Gray says, a writer has to try to imagine what questions a conversational partner would want to ask at the end of each sentence.

Again, are the questions to be ranked; are some questions more important than others? Finding the answers to these questions could form a good research topic for someone.

To show more of how Gray would analyze a paragraph, let us examine another sample paragraph. The first sentence is:

1. *One common fault in bilingual dictionaries is a lack of any indication of the permitted usage or permitted collocations of words: the lack being most noticeable and troublesome in the entries for extended usages, such as in idioms, figures of speech and proverbs.*

Gray says that we should try to imagine what questions are left in the reader's mind after he or she has read this sentence, such as: *Why bring this subject up, anyway? Just why is the lack of any discussion of usage so important? What should be done about it?* Hoey suggests that the questions that a paragraph-initial sentence evokes are: *Why is this topic worth bringing up?* Or, *Why talk about that?* Or, *Why did that happen?*

Now we should expect the following sentences to answer at least some of these questions.

2. *Idioms, figures of speech, and proverbs are often limited in who can use them, in what situations they are used, and what the effect is of using them, for example: young people joking among themselves; people gossiping about other people or animals; adults teasing or admonishing children; people criticizing others; or certain people being cute.*

This sentence partly answers the first and second questions of sentence one, namely *Why bring this subject up?* and *Why is this important?*

The new questions that this sentence raises might be: *That is interesting, but why do you need to put all that in the dictionary?*

3. *If the denotations, connotations, and contexts of such extended usages are not spelled out clearly, some users of the dictionary will not understand the idioms, figures of speech, and proverbs that they may hear, or they may use them in a wrong way, at the wrong time, after hearing them only once or twice.*

This sentence seems to answer the first and second questions of sentence one and the question of sentence two, namely: *Why bring the subject up?* and *Why is the topic important?*

The new question is a reinforcement of the third questions of sentence one: *What should be done?*

4. *Illustrative sentences that use the extended meanings may help, but they must be well chosen; two or more such sentences may be needed, and sometimes an explanatory note is very helpful.*

Sentence four seems to answer the questions of *what should be done?* of sentences one and three.

The new question that is raised is: Specifically, *how should one use illustrative sentences and explanatory notes?*

5. *The extended uses of words in figurative speech, idioms, and proverbs is what gives language much of its interest and spice; the bilingual dictionary maker should not just mention such extended usage and then go on, but, rather, should stop and develop the relevant meanings, collocations, situations, and effects.*

Sentence five repeats and summarizes the whole paragraph and ties it all together nicely. The only question that remains is *just how does one do it?* from sentence four, and, presumably, that will be the topic of the next paragraph.

Now that the paragraph is finished, one should go back and look at the unanswered questions and evaluate their importance. If the questions are important, should they be answered in this paragraph or

in the next paragraph, or should they not be raised at all? If the questions are extraneous, one needs to recast a sentence or two to eliminate those questions.

SUMMARY

While writing a paragraph or after the paragraph is written, look at the HEADS and BODIES of the sentences, look at the PROMISES made and look at the QUESTIONS raised. These are some of the best ways to check one's work and to improve its readability. These strategies are also useful when you edit a friend's paper.

BIBLIOGRAPHY

Fries, Peter. 1980. 'On the status of theme in English; arguments from discourse'. Forum lecture at the Summer Institute of Linguistics, Norman, Oklahoma. See also: Peter H. Fries. 1981. 'On the status of theme in English: arguments from discourse'. *Forum Linguisticum* VI.1-38. See also: Peter H. Fries. 1983. 'On the status of theme in English: arguments from discourse'. *Micro and macro connexity of texts*. ed. by János S. Petöfi and Emel Sözer. Hamburg: Helmut Buske Verlag.

Gray, Bennison, 1977. *The grammatical foundations to rhetoric; discourse analysis*. The Hague: Mouton.

Gunning, R. 1968. *The technique of clear writing*, revised edition. New York: McGraw-Hill Book Co.

Halliday, Michael A. K. 1967-8. 'Notes on transitivity in English', Parts II and III. *Journal of Linguistics* 3:199-244 and 4:179-215.

Hoey, Michael. 1983. *On the surface of discourse*. London: George Allen and Unwin (Publishers) Ltd.

Jones, Larry Bert. 1983. *Pragmatic aspects of English text structure*. Dallas, Texas: The Summer Institute of Linguistics and The University of Texas at Arlington.

Jones, Linda Kay. 1977. 'Theme in English expository discourse'. *Forum Linguisticum* I:3.

Peck, Charles W. 1984. *A survey of grammatical structures*, revised edition. Dallas, Texas: The Summer Institute of Linguistics.

Prince, Ellen F. 1978. 'A comparison of wh-clefts and it-clefts in discourse'. *Language* 54:4, Pp 883-906.

Suñer, Margarita. 1982 *Syntax and semantics of Spanish presentational sentence types*. Washington: Georgetown University Press. pp. 3-9.

NOTES

[1]For years I had been curious as to why some articles in the old *Scientific American* (before the present editorship) were hard to read and some were easy

to read. The ease or difficulty of reading did not seem to correlate with the difficulty of the material being presented. A lecture by Peter Fries in 1981, on paragraph cohesion in some paragraphs he had collected, gave me a clue, and this paper is the result of three or four years of looking at paragraph cohesion and sentence themes in easy-to-read and in hard-to-read scientific articles.

Although most of the ideas in this paper have been gleaned from descriptive works; for better or for worse, this paper is frankly prescriptive, not just descriptive. It gives rules to follow, not just observations on what other people have done. And I take the responsibility for the ideas presented here, with my profound thanks to Peter Fries (who gave the germinal ideas), and to Alan Healey, Larry and Linda Jones, and Velma Leeding who have read an earlier paper and commented on it. An earlier version of this paper appeared as *Technical Memo #116* of the S.I.L. Philippine Branch.

[2]Originally, I began with the terms **THEME** and **RHEME** but I found the definition of THEME (developed first by the Prague Circle and adapted for English by Halliday (1967)) to be too restrictive for my purposes in looking at paragraph cohesion. Halliday defines THEME in English as the first constituent of each clause. By his definition, the **THEME** sometimes consists of only a sentance-introducing adverb. Since the cohesive material can be placed several words farther into a sentence than the THEME goes, I have coined the thems HEAD and BODY, instead of THEME and RHEME.

As long as a sentence hangs together well, I have not found that the themes of non-initial clauses enter into paragraph cohesion.

Fries distinguishes linguists who have combined the contextual component and the sentence-setting component of theme from those who separate the two components. The point of the first part of this paper is that, for easy reading, we need to write in such a way as to make the combiners correct. We need to keep the paragraph topic and sentence topic together.

[3]I first developed my ideas of promises when I was editing a friend's paper and found a paragraph in which the first two sentences talked about cultural parameters and the last three talked about economic problems. The topics were related, but the paragraph felt like the beginning of one paragraph and the end of the following paragraph. In writing up my comments, I said that the first two sentences promised a discussion of cultural items and that the last three sentences did not follow up on those promises. As I thought about the problem more, it dawned on me that coherent, easy-to-read paragraphs are paragraphs that, among other things, fulfill their promises without making further extraneous promises. ■

A Typology of Causatives, Pragmatically Speaking[1]

NANCY BISHOP

The purpose of this paper is to give a brief overview of the typology of causative constructions and to suggest that, in addition to the syntactic and semantic factors governing causative constructions, explicit pragmatic explanations are needed to give an adequate account of their behavior. Let us first examine a brief summary of linguistic typologies, specifically of causative constructions, then some of the pragmatic considerations involved in languages' usage of causative construction.

Linguistic typologies are the classification of languages into different types on the basis of their variation from one another. More that just a simple taxonomy of languages, typologies serve to explain the nature of languages as well as provide proof of language universals.

Not all typologies are of great interest or significance, but those that interact with implicational universals usually are. For example, Greenberg (1966) found a number of implicational universals stemming from the word order typology. He found correlates in the order of the genitive constituent as well as adjectives following the noun it modifies, and the existence of prepositions within the basic word order of VO languages (1966:62,67).

The particular causative typology which is described in detail later is based upon **prototypes**, suggested by Givón (1984). He proposes that languages fall along a continuum, with no discrete boundaries existing between actual types. The prototypes can be determined by a bell curve where the most typical qualities and the most frequent occurrence of those qualities occur. As a result, the prototypes are sometimes more ideal than real, but serve as a basic model of a given type.

Causality presupposes two conditions: the dependency of the effect event on the causing event and the required sharing of certain referential points, such as time, space agency, etc. The scope of

causality in this paper will not include interclausal constructions, instrumental causatives or permissive cause *per se*.

Comrie (1981) and Shibatani (1975) have extensively described the typology of causative constructions. To a lesser extent Syeed (1984) has also described causative typology in terms of affectivity. My work has simply been to combine all three of these descriptions, to test their validity on a wide sample of languages taken from secondary sources, and to introduce the pragmatic considerations which are necessary to explain the patterns found.

Languages typically use one or more of three causative prototypes: morphological, analytical and lexical causatives. An example of each type is shown below:

1) MORPHOLOGICAL: Kewa, Papua New Guinea

nipú-	mí	onaa	ma-	píraa	-ria
3sg	**AG**	**people**	**cause**	**sit-3sg**	**past (alo)**

'He made the people sit down.'
(Franklin 1971:73)

2) ANALYTICAL: Thai

sàákhàá	tham	dɛɛn	rɔ́ɔŋhâây
Saka	**cause**	**Daeng**	**cry**

'Saka caused Daeng to cry.'
(Vichit-Vadakan 1976:468)

3) LEXICAL: English
She shoved her sister off the cliff.

Causative typology interrelates with two other typologies, morphological and word order. Morphological typology divides languages into isolating, agglutinating, inflecting and polysynthetic types. A language's morphological type will govern in part the type of causative construction most favored. A continuum can be made with isolating languages to the left while polysynthetic ones are to the right. Analytical and lexical causatives co-occur with isolating languages while morphological causatives co-occur with polysynthetic languages:

Isolating	Agglutinating	Inflecting	Polysynthetic
Lexical/Analytical	Analytical/Morphological		Morphological.

Word order typology is concerned with the normal order of the subject (S), verb (V), and object (O) constituents. It has been found that VO languages are usually more isolating, therefore, they usually use analytical causatives. OV languages generally are more agglutinating in nature, so morphological causatives are more prevalent. This is explained on the premise that causative constructions are underlyingly made up of two predicates, which in surface structure come into close proximity bringing about agglutination in the case of OV languages.

In addition to interaction with other typologies, causative constructions are sensitive to a number of semantic contexts. Shibatani (1975) presents four pairs of semantic factors that determine the use of languages' causatives in specific contexts. These pairs are referred to as: coercive vs. non-coercive, directive vs. manipulative, direct vs. indirect, ballistic vs. controlled.

Coercive causation has to do with the amount of (physical) force exerted by the causer on the causee. It implies resistance on the part of the causee, which usually requires the causee to be animate. Non-coercive causation is oftentimes permissive in nature.

4) COERCIVE:
'I made the doctor come.'

5) NON-COERCIVE:
'I had the doctor come.'
(Shibatani 1975:41)

Directive causation implies the submissive volition of causee. Directives are frequently verbal instructions or demands, so that an animate causee is required that can volitionally and physically respond. Manipulative causation frequently involves inanimate causees which must be physically manipulated and cannot volitionally resist. If a language can use more than one strategy, it will generally

use the lexical form to express manipulation while the morphological form will be used for directive causation.

6) DIRECTIVE: Japanese

Boku	wa	kodomo	ni	tat	-ase	-ta
1sg	**NOM**	**child**	**DAT**	**stand up**	**-CAUSE**	**-TNS**

'I had the child stand up.'

7) MANIPULATIVE: Japanese

Boku	ga	boo	o	tate	-ta
1sg	**NOM**	**stick**	**ACC**	**stand up**	**-TNS**

'I stood the stick up.'
(Shibatani 1975:55)

Sentence (7) becomes ungrammatical if 'child' is substituted for 'stick'.

Direct causation implies a straightforward means of bringing about the effect event, while indirect causation makes use of a secondary or intermediary means. Both direct and indirect causation can be accomplished by physical or verbal acts. Direct causation is frequently expressed by lexical causatives; there is some evidence that the lexical form represents the perception of the speaker of the caused event. That is, lexical causatives represent only one event in the speaker's mind, rather than two. Indirect causation entails a secondary means of achieving the effect event, usually a human causee who retains a degree of control. Analytical causatives are generally used to express indirect causation.

8) DIRECTIVE: Blackfoot, U.S. & Canada

nitsiikstakiipiaawa	nitana	mamiiksi
I-count-intro-cause-ANT	**my daugher-ANT**	**fish-pl**

'I made my daughter count the fish.'

9) MANIPULATIVE: Blackfoot, U.S. & Canada

nitsiikstakiattsaawa	nitana	mamiiksi
I-count-intro-cause-ANT	**my daughter-ANT**	**fish-pl**

'I had my daughter count the fish.' (by some intermediary means)
(Frantz 1971:66)

Ballistic and controlled causation might better be understood as instigating and accompanying causation. The implication is that in ballistic causation the causer instigates a cause event which will bring about the effect event, but the causer is not involved beyond the initial control of the causee. In controlled causation, there is

accompaniment or continuous control exerted by the causer from the moment of inception until the final effect event is accomplished.

10) BALLISTIC:
'The explosion made the building shake.'
(McCawley 1976:119)

11) CONTROLLED:
'John dressed the child in five minutes.'
(1976:117)

The correspondence of the three types of causative constructions with the four pairs of semantic factors can be summarized by saying that lexical causatives generally convey the meaning of manipulation, directness, coercion and at least in English, 'ballisticness'. Analytical and morphological causatives generally express the meanings of directive, indirect, non-coercive and permissive causation. There is overlap of these semantic features in almost every example, e.g., if there is direct causation, there is likely to be manipulation and coercion as well.

Lastly, the impact of affectivity on the choice of causative constructions should be given a cursory examination. Affective causative verbs are ones that have a benefactive effect on the causee, such as receiving or benefiting from the action of the verb. The following examples demonstrate affective/non-causative, affective /causative and non-affective/non-causative constructions:

12) AFFECTIVE/NON-CAUSITIVE: Kashmiri

me	h'oč̄h	arəbi	tas	niš
1sg	**learn**	**Arabic**	**3sg**	**near**

'I learnt Arabic from him.'

13) AFFECTIVE/CAUSITIVE: Kashmiri

təm'	hechinövus	bə	arəbī
3sg	**learn-CAUS**	**1sg**	**Arabic**

'He taught me Arabic.'

14) NON-AFFECTIVE/NON-CAUSITIVE: Kashmiri

me	tsot	kul	tas	niš
1sg	**cut**	**tree**	**3sg**	**near**

'I cut the tree near him.'
(Syeed 1985:57,8)

So far only the briefest of sketches has been given to describe causative typology and factors which govern its usage. Now, we turn to pragmatic conditions which may also regulate a speaker's choice of causative constructions. Pragmatics is defined in accordance with the International Pragmatics Association's Working Document #1 which posits that it is a perspective on language, rather than a separate discipline or theory, that examines the objects, levels, stages, degrees and functions of adaptation that are made by speakers (Verschueren:1987).

First, the intent of the speaker of a causative construction would seem to be of tremendous significance in determining the strategy used. What the speaker is trying to accomplish through his statement of causality affects the way in which he will express it. Specifically, it seems that causative statements are frequently used for one of two speech events. One event or purpose is the speaker's desire to boast or take the credit for an action; in that situation, the speaker is the causer and via the expressive means available to him in a specific language, he emphasizes his own role in causing an event (or state). An English example could be:

15) 'I defeated the incumbent candidate by a landslide vote.'

English relies on both the fronting of the causer and the intonation pattern to place emphasis on the speaker. Note that a lexical causative construction is used to express an event which was non-coercive, more directive than manipulative, and indirect in nature.

The second common event or purpose of causative constructions is evaluation, specifically shifting the blame for something onto someone else. Franklin (1986: personal communication) comments that the morphological causative construction is only used in Kewa when the speaker intends to emphasize the causer's responsibility for bringing about something. Using English again as an example:

16) 'He made me flunk the test.'

The speaker's intent in constructions similar to (16) is to express, however metaphorically, the coercion, manipulation, and directness of the causer's actions upon the causee. Note that the causee is animate, retaining control and volition. A lexical causative could be substituted in this construction, but only if the causer has the authority to carry

out the action, such as 'He flunked me on the test'. The implication, however, of the analytical causative (16) is that the causer's action is unjust and demands restitution. The blame or responsibility is clearly placed on the causer. The parallel lexical causative can have two interpretations, one of blame and injustice or another of factivity, implying that the causer's action was probably warranted, although not desired.

The importance of these observations is that the typology of causatives would not explain the occurrences of lexical and analytical causatives in these sentences. The reason appears to be that the choice of causative constructions in these two situations is pragmatically determined, rather than solely syntactically and semantically determined.

A second pragmatic factor to consider is the social setting in which the causative statement is being made. Within my own Western culture, unless the intention of the speaker is to defame someone, he will use an indirect means to express causation when he is in a public social setting. Figurative speech such as the use of innuendos, euphemisms, passive constructions, and unspecified causers is prevalent:

17) 'They heavily encouraged me to find another job.'

18) 'I was fired from my job last week.'

19) 'Someone revealed my 'mid-morning cocktails' to my boss.'

In contrast to the public setting, the speaker will probably use more overt expressions of causality in a private setting, such as in his home or among his closest companions. Contrast the previous examples with:

20) 'Bob (my boss) sacked me yesterday.'

21) 'Bob fired me last week.'

22) 'That 'goodie-two-shoes' Sally squealed to my boss that I drink on the job.'

The social setting, whether public or private, plays a role in determining how a speaker will express causation, especially for the purpose of shifting responsibilities. How much of this difference is

due to a public vs. private setting as compared to shared referential information is difficult to ascertain. Either motivation could prompt the same type of results in English.

A third pragmatic consideration is the social relationship of the speaker to the hearer. Constructions that parallel those used in different social settings are used in formal and informal social relationships. The more indirect expressions of causality are normally used in English if speaking to someone of a higher rank or of a greater social distance. In social relationships that are more intimate, the direct means of causal expression are frequently used; likewise, if the social rank of the hearer is equivalent to or lower than the speaker's, the normative expression is similar to those found in examples (20) - (22).

Another factor to be considered is the cultural or referential framework of the speaker. The existence of cause and effect is a universal quality of man, but its perception, scope, and conditions are culturally based. What can cause what is defined by a culture's world view. The animacy of something, which relates to its ability to be a causer and a causee, is specific to the culture of the speaker. Franklin (1986) notes that animacy is attributed to ambient entities or forces by the Kewa. To some degree, English allows elements, such as the wind or rain, to function as causer, but it seems it is more figurative than literal in meaning.

What is considered coercion or manipulation is also a culturally defined quality. In English, we imply coercion in statements like (17). Coercion, as well as manipulation, have extended their meanings in English to include situations in which the speaker *feels* as though he is being physically coerced or manipulated. This extended meaning is not necessarily universally held; Shibatani (1975) demonstrates that a cultural expression of manipulation may exclusively refer to an inanimate causee being physically acted upon by an agentive causer. (See (6) and (7).)

These pragmatic factors may help to explain some language data that otherwise seem inconsistent with the typology. For example, the use of two different instigative causatives in Blackfoot (see (8) and (9),) could possibly be attributed to social setting or relationship factors, as much as to direct or indirect causation.

Hawaiian and Ponapean both utilize stative verbs extensively; when the causative affix is added, the verbs become inchoative. However, they are understood to be causative. Perception of causality culturally is probably being expressed in that type of construction.

23) Ponape, Micronesia

ADJECTIVES	INTRANSITIVE VERBS	TRANSITIVE VERBS
ketiket	kaketiket ,	kaketiketih
to be numb'	*'to become numb'*	*'to cause numbness'?*
	'to cause numbness'?	
mer	kamer	kamere
'to be rusty'	*'to become rusty',*	*'to cause to rust'?*
	'to cause to rust'?	

(Rehg 1981:216)

Angas is a Chadic language that is similar to Hausa, both languages using an analytical causative. Angas, however, always employs the subjunctive mood (Burquest 1986: personal communication). It would seem that this expresses something about the culture's concept of causality, perhaps its uncertainty.

Finally, in his description of Yidiɲ, Dixon's decision to label the **-ŋal** controlling construction as *controlling* probably reflects the speaker's purpose or something about the culture's perception of causality, animacy, etc. Dixon states:

> The important point here is that the only way a man can 'control' a woman's coming (from point A to point B) is to COME WITH her: the semantic structuring . . . is, in essence 'the man controls (the woman comes)'. That is, a **-ŋa-l** form in Yidiɲ can NOT mean that someone MADE someone do something by TELLING them to do it. The sense of **-ŋa-l** involves control of a physical nature . . .
> (Dixon 1977:316)

Specifically in Yidiɲ, the obligatory controlling of a woman's travels by another human agent to ensure her arrival at a destination is a very different cultural view than that of the West, at least among women.

In conclusion, I would like to suggest that the above pragmatic parameters be considered within the framework of the causative typology in order to make it a truly integrated typology. It goes without saying that further cross-linguistic research is needed to validate these suggestions. Certainly other factors remain to be unearthed.

REFERENCES

Aissen, Judith. 1979. *The syntax of causative constructions*. New York, NY: Garland Publishing.

Burquest, Donald. 1982. 'Language universals'. Research papers of the Texas SIL, Dallas, TX: Summer Institute of Linguistics.

---. 1986. Personal communication.

Butterworth, Brian, Bernard Comrie, and Östen Dahl, ed. 1984. *Explanations for language universals*. New York, NY: Mouton.

Cole, Peter. 1982. *Lingua descriptive studies: Imbabura Quechua*. Vol. 5. Amsterdam: North-Holland Publishing Co.

Comrie, Bernard. 1975. 'Causatives and universal grammar'. *Transactions of the Philological Society*. 1-32. Oxford: Basil Blackwell.

---. 1976. 'The syntax of causative constructions: cross-language similarities and divergences'. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:264-311. New York, NY: Academic Press.

---, and Norval Smith. 1977. 'Lingua descriptive studies: questionnaire', *Lingua*, Vol. 42.1. Amsterdam: North-Holland Publishing Co.

---. 1981. *Language universals and linguistic typology*. Chicago, IL: University of Chicago Press.

---, 1985. 'Causative verb formation and other verb-deriving morphology'. *Language Typology and Syntactic Description*, ed. by Timothy Shopen. Vol. 3:309-348. Cambridge: Cambridge University Press.

Dixon, R. M. W.. 1977. *A grammar of Yidip*. Cambridge: Cambridge University Press.

---. 1980. *The languages of Australia*. Cambridge: Cambridge University Press.

Elbert, Samuel and Mary Pukui. 1979. Hawaiian grammar. Honolulu, HI: The University Press of Hawaii.

Fodor, J.D. 1970. 'Three reasons for not deriving 'kill' from 'cause to die''. *Linguistic Inquiry*. 4:429-435.

Franklin, Karl. 1971. 'A grammar of Kewa, New Guinea'. *Pacific Linguistics*, Series C, 16. Canberra, Australia: Pacific Linguistics.

---. 1986. Personal communication.

Frantz, Donald. 1971. *Toward a generative grammar of Blackfoot*. Norman, OK: Summer Institute of Linguistics.

Givón, Talmy. 1975. 'Cause and control: on the semantics of interpersonal manipulation'. *Syntax and semantics*, ed. by John Kimball, Vol. 4:59-88. New York, NY: Academic Press.

---. 1984. *Syntax: A functional-typological introduction*. Philadelphia, PA: John Benjamins Publishing Co.

---. 1985. 'Iconicity, isomorphism, and non-arbitrary coding in syntax'. *Iconicity in Syntax*, ed. by John Haiman, 187-219. Philadelphia, PA: John Benjamins Publishing Co.

Greenberg, Joseph H. 1966a. 'Language universals with special reference to feature hierarchies'. *Janua Linguarum*, Series Minor 59. The Hague: Mouton.

---. 1966b. *Universals of language*. 2nd ed. 62-67. Cambridge, MA: MIT press.

---, Charles Ferguson and Edith Moravcsik, ed. 1978. *Universals of human language*. Vol. 1-4. Stanford, CA: Stanford University Press.

Hyman, Larry. 1984. '[illegible] and substance in language universals'. *Explanations in language universals*, ed. by Brian Butterworth, Bernard Comrie, and Östen Dahl, 67-86. New York, NY: Mouton.

Itkonen, Esa. 1983. *Causality in linguistic theory*. Bloomington, IN: Indiana University Press.

Lehmann, Winfred [illegible], ed. 1978. *Syntactic typology and studies in the phenomenology of language*. Austin, TX: University of Texas Press.

Mallinson, Graham, and Barry Blake. 1981. *Language typology: cross-linguistic studies in syntax*. Amsterdam: North-Holland Publishing Co.

McCawley, James. 1976. 'Remarks on what can cause what'. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:117-29. New York, NY: Academic Press.

---. 1978. 'Language universals in linguistic argumentation'. Linguistics in the 70's directions and prospects. 205-19. *Studies in the Linguistic Sciences*, Special Issue. Urbana, IL: Dept of Linguistics, University of Illinois.

McCawley, Noriko. 1976. 'On experiencer causatives'. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:181-20. New York, NY: Academic Press.

Rehg, Kenneth L. 1981. *Ponapean reference grammar*. Honolulu, HI: The University Press of Hawaii.

Shibatani, Masayoshi. 1972. 'Three reasons for not deriving 'kill' from 'cause to die' in Japanese'. *Syntax and semantics*, ed. by John Kimball. Vol. 1. New York, NY: Academic Press.

---. 1975. *A linguistic study of causative constructions*. Bloomington, IN: Indiana University Press.

---. 1976. 'The grammar of causative constructions: a conspectus'. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:1-39. New York, NY: Academic Press.

Shopen, Timothy, ed. 1985. *Language typology and syntactic description*. Vol. 3. Cambridge: Cambridge University Press.

Syeed, Sayyid. 1985. *Morphological causatives and the problems of the transformational approach.* Bloomington, IN: Indiana University Linguistics Club.

Talmy, Leonard. 1976. 'Semantic causative types'. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:43-115. New York, NY: Academic Press.

Verschueren, Jef. 1987. 'Pragmatics as a theory of Linguistic Adaptation'. *International Pragmatics Association Working Document #1.* Belgium: University of Antwerp.

Vichit-Vadakan, Rasami. 1976. The concept of inadvertence in Thai periphrastic causative constructions. The grammar of causative constructions. *Syntax and semantics*, ed. by Masayoshi Shibatani. Vol. 6:460-71. New York, NY: Academic Press.

Wachowicz, Krystyna. 1976. 'Some universal properties of morphological causatives'. *Working papers on language universals.* Vol. 20. Stanford, CA: Stanford University.

NOTES

[1]Presented to the International Symposium on Language and Linguistics on August 10, 1988. ■

ANNOUNCEMENT

The 15th annual
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Papers are to include selections from the following topics, in relation to **First and Second Language Aquisition**:

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An Interesting Extraction Experiment:

Using FIESTA to find the Context for Words in a List

EUGENE LOOS & DAN TUTTON

Recently a colleague working on a dictionary wrote asking if we could extract sentence examples for him of about 200 words in Shipibo. The examples were to be drawn from the Shipibo New Testament, which we happened to have already compiled in FIESTA.

Dan Tutton soon had a display of extracted sentences that was very impressive when viewed in MS-WORD. In each case, after the identifying reference came the word under study, centered for visibility. On the next line came the example sentence. The example sentence in Shipibo was in normal typeface, and the word under study within the sentence was displayed in bold underlined italics--unmistakable! It was impressive because of the seeming ease with which Dan produced the huge selection of sentences, all so easily scannable because of the same powerful display features. Here is Dan's account of how what would have seemed like an enormous amount of work could be accomplished with such surprising rapidity:

The following are the steps necessary to use FIESTA to find the context for selected words. First, compile the data base. See the FIESTA documentation to do this.

Once the database is loaded, create a file that has a list of the words for which the context is desired. This should be an ASCII file (that is, no paragraph or formatting codes are used), with at least one space between each entry. Then start up FIESTA and load the database. At the main menu, choose:

F3 Display/Print text

Then open an output file by pressing **<Alt>-F1**. Respond to the prompt by giving an output file name. Then choose:

F2 Display formatted text

choose **p** under 'printer adjustment'. Set the ASCII sequences to turn the bold, italics, and underlined styles on and off. For preparation for conversion to WORD format using the SF-WORD utility, the sequences should be the following (these numbers are the the ASCII values of the arbitrarily chosen codes to be used, as shown later):

begin italic: 124 105 116 123
end italic: 124 125
begin bold: 124 98 111 123
end bold: 124 125
begin underline: 124 117 108 123
end underline: 124 125

After these printer options are set, press F8 until back at the main menu. At the main menu, choose:

F5 Concordance

At the concordance menu, set the base line toggle options to the correct values. For descriptions of the base line options, hit **<Alt>-F8** for help and choose the appropriate letter (Note: the help screens are *case* sensitive!)

When the base line options are correctly set, move the highlight onto:

F3 Make word choice file

and *without* pressing **<RETURN>**, type the name of the file that contains the words for which you wanted the context. *Then*, press **<RETURN>**. The output will go to the file you designated earlier. If you wish to change output files, press **<Alt>-F1** to return to screen output and close the present output file. Then press **<Alt>-F1** again to open a new output file. Exit FIESTA by pressing **F8** until the screen appears asking for confirmation concerning exiting the program.

Once the files with the context for the words have been created, in order to view them in WORD with visual enhancements, they must be run through the SF-WORD program. In order to preserve the FIESTA formatting, before SF-WORD can be run, the FIESTA output must also be run through a change table to prepare hard line returns for conversion to word format with SF-WORD. This change table, referred to here as NL.CCT, is very simple, and is listed below:

```
nl > '¦<nl>' nl
```

The command line to make this change would be the following:

```
CC -t NL.CCT -o OUTPUT.SFM OUTPUT.LST
```

where: OUTPUT.LST is the file output by FIESTA
OUTPUT.SFM is the output from CC using the NL.CCT

After the output from FIESTA has been run through this change table, a WORD style sheet must be prepared that contains character styles with codes that correspond to the codes output by the FIESTA program. The codes output by FIESTA were those defined in the PRINTER.DBS database discussed earlier. The convention used here was the following:

Italic	=	**¦it{ .... ¦}**
Bold	=	**¦bo{ .... ¦}**
Underline	=	**¦ul{ .... ¦}**

In order to run the SF-WORD program, therefore, we must create a style sheet in WORD that has character styles that correspond to these three styles (*it*, **bo**, and ul). This is done by entering the gallery

in WORD and creating three character styles with two letter key codes corresponding to these three styles (*it*, bo, and ul). Such a style sheet, which we will refer to as FIESTA.STY would look like the following:

```
1 [. . . . . 1 . . . . . 2 . . . . . 3 . . . . . 4 . . . . . 5 . . . . . 6 . . . ]
  1  IT Character 1                          ITALIC CHARACTER
       Pica (modern a) 12 Italic.
  2  BO Character 2                          B, I, U CHARACTER
       Pica (modern a) 12 Bold Italic Underlined.
  3  UL Character 3                          UNDERLINE CHARACTER
       Pica (modern a) 12 Underlined.


COMMAND: Copy Delete Exit Format Help
       Insert Name Print Transfer Undo
Select style or press ESC to use menu
GALLERY          {}          ?          Microsoft Word
```

Once this style sheet has been prepared in word and saved to a disk, it can be used with the SF-WORD program to transfer the list created by FIESTA into word format. The command line is the following:

SF-WORD OUTPUT.SFM -o OUTPUT.DOC -s FIESTA.STY

where, OUTPUT.DOC is the file that can be viewed in WORD in FIESTA format with the screen enhancements

The preparation for viewing in WORD is therefore a two step process as shown below:

Fiesta Output file	--->	CC.EXE with NL.CCT	--->	SF-WORD.EXE with FIESTA.STY	--->	.DOC file that can be read in word

■

INSTEAD OF THE CULT OF PERSONALITY ...

Reprinted by permission from *The Carrier Pidgin*, November-February 1988-1989 issue.

DEREK BICKERTON

I would like to share with readers of the *Carrier Pidgin* some things that I observed earlier this year and the conclusions that I drew from them. Most of my career has been concerned with the purely theoretical aspects of our discipline, but on a field trip to Mauritius and the Seychelles I was rather forcibly made aware that there are other and, at least to those whose lives and futures are involved, more important and more immediate dimensions.

These two independent nations, Mauritius and the Seychelles, have had, until quite recently, a very similar history, and they continue to have an almost identical native language. But as far as the education of most of their children is concerned, they differ as night from day. In the Seychelles, all primary education up to and including the fourth year is carried out through the medium of the native language of virtually all its citizens, Seselwa (perhaps better known as Seychellois Creole). Some subjects (social studies, home economics, art) continue to be taught in Seselwa for the next five years. Seselwa is taught as a subject throughout the school curriculum. In Mauritius, Morisyen (a.k.a. Mauritian Creole), the native language of the vast majority of the population, is totally banned from the schools, as a subject and as a medium of instruction; literacy is instilled via English or French, languages which are totally unknown to most primary-school entrants.

Any unbiased individual who has seen what the two systems produce can hardly fail to see which is the better. In the case of the Seychelles, we now have some objective data. A systematic evaluation compared scores of the 1986 Grade 6 (the last class prior to the introduction of Seselwa as a medium of instruction) with those of the 1987 Grade 6, first to be taught through Seselwa. Scores were about even on English; on French, the 1987 class showed a gain of 12

percentage points, on math of four, on science of seven, and on social studies of nearly 11. The prediction by the enemies of creole, that education in creole would lower scores in English and French, has failed to be borne out.

In Mauritius, of course, no comparable data is available. Official figures give an optimistic picture of literacy that is certainly not borne out by the products of rural schools, many of whom are illiterate or only semi-literate, and very few of whom achieve any significant degree of command over French or English.

But of course the benefits of education in creole go far beyond the raising of a few educational measures. A person who is taught to despise his or her native tongue will never be quite a whole person; a nation forced to rely on languages that its citizens cannot speak natively will never be a full and free nation. Education in creole is vital, not just for education's sake, but for building citizens with a sense of self-worth and dignity, and for building nations with a sturdy sense of independence - nations that will not kowtow to supposedly more "advanced" societies, but will pursue the best interests of their own people in their own way.

But what has this got to do with us, the creolists? A great deal, I think. For many years now, I and other people like me have lived well off creole languages. We have published, and on occasion have been paid for it; we have flown expenses-paid to conferences in exotic locales; these conference presentations and publications have earned us tenure and promotion, so that we could continue to increase and enjoy salaries that are probably (there are no exact statistics) at least twenty times what the average speaker of these languages earns. Moreover, we have a voice and they do not. We have access to the media, and to global networks of which they are not even aware. Do we not owe them something?

I think we do. And I would therefore like to propose an organization that will have as its aim the adoption of creole as the medium through which literacy is achieved and as the medium of general instruction at least in primary schools. In all those areas where the creole language is spoken by a majority of the population. Since it's hard to discuss anything without a name, let's call it the Organization for the Development of Creole As a Means of Education, of

ODCAME, until or unless someone can think of a snappier title/acronym (please let me know if you do).

What would be the main aims of ODCAME? If enough people agree that such an organization is desirable, it might begin by simply gathering the facts. Do you know what's the educational system in Sao Tome? In St.Lucia? In the Solomons? Nor do I. It's necessary, before anything can be done, to find out exactly what is the status of creoles, education-wise. In all the places where any kind of creole is spoken, and to make that knowledge available to all interested parties.

Then, where creole has already been adopted for educational programs, as in the Seychelles and Aruba, ODCAME might look for facts and figures-are there objective as well as subjective, quantitative as well as qualitative measures of how successful such programs have been? Then it might want to target areas where creole has not yet been adopted, to locate and aid any pro-creole individuals and organizations in those areas, to keep them supplied with facts and figures about developments elsewhere, and to use whatever intellectual clout its members might have in order to advocate a larger role for creole in those areas. I'm sure, in the collective brains and experience of *Carrier Pidgin* readers, there already exists a great deal of the information that would be needed to start. Until ODCAME is put on a more formal footing, you can write to me at the Department of Linguistics, University of Hawaii, Honolulu, Hawaii 96822, about any or all of the following:

(a) if you are prepared to support the organization;

(b) if you can contribute any information on (i) the current status of creole in any educational system (ii) the nature of the opposition to creole, where it is not in use for educational purposes (iii) the names and addresses of pro-creole individuals and organizations;

(c) if you have any suggestions for making the organization more effective, and in particular if you yourself feel able to play an active part in it.

The quality of your response will help to determine how far ODCAME can proceed and what will be within its powers to accomplish. I hope you'll agree with me that our professional

responsibility does not end with formal academic studies. Creole languages are still despised in many countries of the world. People who speak those languages are still trapped in laborious and unrewarding occupations because of prejudice against the kind of language they speak. Children are still denied the rights - rights such as that of learning through one's own mother tongue - that most of us benefited from without even realizing that others did not share them. We, and we alone, have the scholarly authority to fight this ignorance and prejudice - to ensure that the languages we study and profit from, and the speakers of those languages, are given the respect they deserve. ■

CALL FOR PAPERS[1]

The Linguistic Association of the Southwest (LASSO) has invited abstracts to be submitted for papers to be presented at their annual meeting. Papers on nearly any topic within the broad scope of linguistics will be welcome. Presentation time for each paper including discussion is to be approximately 25 minutes.

The conference will be held on **October 19-20, 1990** at the University of Texas at El Paso. The deadline for submission of abstracts is **June 15, 1990**

Only those who have paid-up membership in LASSO may submit for the opportunity to present papers (dues, regular: $15 student: $7.50, may be enclosed with the abstract). Registered graduate students are encouraged to submit their abstracts as entries for the **Helmut Esau** prize (which includes a $200 award).

Send your abstracts to:

Prof. Richard V. Teschner
Dept. of Languages and Linguistics
UTEP
El Paso, TX 79968

[1]Source: The newsletter of the Linguistic Association of the Southwest, March 1990, page 3. Please see this source for further information on membership and submission of papers.

Another Language Learning Gauge[1]

HARRIET HILL

Learning languages is not easy, We can be grateful for the many language learning resources that are available to us today. Perhaps the most popular resource is the book *Lamp* by the Brewsters. It has helped may of us organize our language learning program and make progress, rather than flounder in the morass of data all around us.

The final section of the book, 'Evaluating Your Progress', was always my favorite. I loved to browse through all the levels and gauge my language learning progress. Sometimes it provided the encouragement I needed to go out and face the throngs and keep trying.

As I worked and worked to learn the language, I found the evaluation section didn't really correspond to my language learning situation. First of all, it was designed for a modern situation with buses and telephones, etc., and I was living in a little village, where the whole scene was plainly different. (Actually the whole LAMP system is based on having a literate language helper, which often is not available in our type of work.) For quite a while, I thought this was the reason the LAMP scale didn't ring true to me. As a criticism of the scale, it is not too serious, because it is easy enough to make adaptions to the village lifestyle. Taking a bus or train is equivalent to being able to travel by bush taxis. Talking on the phone is equivalent to being able to talk to people that you can't see.

Later, however, I realized a second, and more fundamental problem. The LAMP scale emphasizes encoding: I can tell the time of day, I can give information of various sorts. Encoding is somewhat easy, because you have control over it. You know what you want to say and just have to figure out the right words, structures and pronunciation. What many language learning systems ignore is that after you learn to say, 'Where is the post office?', you have to be able to understand the person's answer. The decoding of that answer, or any speech, is much more difficult. The speaker doesn't know what words you know and don't know. He/she can present the same basic answer to your question in a hundred different ways. You have to be able to decode

his/her response *before* you can go on to encode anything else. Language learning is both encoding and decoding, but the decoding is more difficult because there are so many possibilities open to the native speaker, and you have no control over his/her selections.

Having established that decoding is more difficult than encoding, I worked out my own system to measure my progress. The parameters that determine the difficulty of a language situation are the following:

1. **Degree of predictability.** Where predictability is high, it is much easier to understand. Formulaic sentences, such as greetings and leave-takings are the most predictable. Conversations linked to the immediate environment are more predictable than conversations about topics not linked to the immediate environment. For example, If a child is holding his jaw, and moaning in pain, and his mother says to you, *'Huba guba guba'*, you can fairly guess she's saying something about a toothache.

2. **Implicit information.** If the conversation or speech is directed to you, the speaker includes information you will need to know to understand. If the conversation or speech is directed to other native speakers, there will be a lot of information they share that won't need to be verbalized. Without knowing this implicit information, comprehension can be difficult or impossible. As you listen in on the conversation, you will be grasping to understand. This does not necessarily mean you don't know the language. It can mean that you just don't happen to know the implicit information necessary to understand that particular exchange. For example, I was sitting in on a long discussion between three people about the lawless conditions in Abidjan. As I listened, I became more and more discouraged, wondering if I'd ever learn the language. There was something about 'sand' that kept coming up, and just didn't fit with the rest of the conversation and yet seemed thematic. When they had finished, I asked my friend about the sand. 'Well,' he said, '*sand* is the name of the woman who was raped.' That was one key bit of implicit information. In conversations, there can be many bits of implicit information. When a certain threshold is reached, you are completely lost, even though you might know the individual words and grammatical structures.

3. **Familiarity of topic.** Obviously, your comprehension is greater in domains where you know the vocabulary. I should point out that even in my mother tongue, there are topics I am unable to converse on, such as computer lingo, technical areas, and to my shame, even some non-technical areas. Bible stories are easier to follow than traditional stories, because you already know the basic content.

4. **Opportunities for clarification.** If the situation allows for you to ask questions for clarification, decoding becomes much easier. Questions allow you to clarify phrases you're not sure of, and also slow down the rate of information. You can tolerate a certain threshold of words and phrases you're not sure of, but once you pass that threshold you have to admit that you're lost. If there is no possibility to ask questions, decoding becomes much more difficult. Once you have lost the gist of the speech, it is very difficult to get a handle on it again, as many speeches build on information given earlier in the speech.

5. **Ability to sustain concentration.** Language learners know how utterly exhausting learning a foreign language can be. If there is opportunity for interaction in a language situation, it is easier to remain alert. If the language situation is an extended monologue, it is extremely difficult to sustain concentration.

6. **Differences in discourse features.** People do not generally speak in isolated sentences. Most speech is a discourse of some sort. Discourse structure can vary tremendously from that of our native languages. Without a good grasp on the discourse structure, following a conversation or speech will be difficult. For example, pronoun reference rules vary tremendously between English and African languages. Without knowing the African system, I cannot know who is being referred to in a discourse.

7. Differences in culture and logical processes. Another trouble with decoding is that learning a language is not merely a matter of substituting foreign words for our own concepts. When encoding is the focus of a language learning program, this can be a tendency. I have worked hard learning how to encode 'my' sentences into the target language. Only after I elicited the sentences and worked on them diligently did I find out that you *could* say that in the language, but no one ever *would*. Great! If decoding is the focus of a language learning program, the learner can start with native texts and build from these. Then the forms and structures can be completely natural. I'm sure you've all experienced the difficulty of giving an idiomatic, natural translation in English for some sentences in a foreign language that just didn't translate well. Perhaps it is something we just don't say in English. It is translatable, but no native English speaker would ever say it.

Added to this are the differences in logical processes that exist between your culture and the target culture. One area where difficulties arise is in differences in logical processes. There have been times when I understood every word, the pronoun reference, and the grammatical structures, but I couldn't make sense of it. An example of this is when my 'sister' in the village was explosively angry at her husband, and yelled at him for 30 minutes at the top of her lungs. Later I asked her to explain the problem. There were so many logical leaps and cultural expectations involved in the problem, I was at a loss to make sense of it. When this sort of problem predominates your language learning, you are well into the study of receptor worldview. However, culture learning and language learning are linked from the start, and do not separate neatly into distinct compartments. You cannot learn a foreign language by simply substituting foreign words or grammatical structures for your native concepts. A different language encodes an entirely different perception of reality.

With these parameters measuring the difficulty of a language situation, I suggest the following gauge to measure progress. Any number of language situations could be evaluated with regard to their difficulty. I have suggested a few common language situations:

+ = the factor is present, making the situation easier
- = the factor is absent, making the situation more difficult
\ = the factor is not significant

	Predictablity	Familiarity of topic	Clarification opportunities	Low amount of implicit info	Easy to concentrate	Similar discourse structure	Similar logic patterns	
Beginning language learning								
1. Greetings, leave-taking	+	+	+	+	+	\	\	
2. Exchange of news	+	+	+	+	+	\	\	
Speech addressed to you:								
3. Dialogue on a familiar topic	+/-	+	+	+	+	\	\	related to context.
4. Dialogue on a familiar topic	-	+	+	+	+	\	\	not related to context.
5. Dialogue on an unfamiliar topic	-	-	+	+	+	-	-	not related to context.
Speech addressed to insiders:								
6. Monologue on a familiar	-	+	-	+	-	-	-	topic.
7. Monologue on an unfamiliar	-	-	-	-	-	-	-	topic.
8. Dialogue between 2 insiders	-	-	-	-	-	-	-	on an unfamiliar topic.

NOTES

[1]Reprint from *Cross Fertilization Series*, No. 40; SIL Côte d'Ivoire/Mali. ■

Report on the Cushita Conference

GEORGE PAYTON

I want to let you know the results from the linguistic conference I attended in Turin, Italy last November. It was the Second Symposium on Cushitic and Omotic Languages, sponsored by the University of Rome, Department of Linguistics. The dates were November 16-18, 1989.

The conference was very beneficial to me. First, I made contact with others who have already published articles on Cushitic languages, the language family that Orma belongs to. I have had a hard time finding anything written on Orma here in Nairobi, so it was good to at least find things written on the same family.

Another benefit was the opportunity to interact with the other linguists. Much of what I learned at the meetings was gained through private conversations, not just listening to presentations. I also came to see that SIL has a good relationship with the European linguists, so it is good to keep up the relationships that others have started. I agreed to send some of the people any articles that I might write in the future.

Lastly, after having been in contact with other linguists, I am more highly motivated to write linguistic articles that may be published. The articles must show a sufficiently high quality of linguistic research. So, I hope that, with the help of Ed Loving and other consultants, I can produce some papers on Orma.

Thanks to Hans-Juergen Scholz and the international administration for allocating funds to pay for this trip. ■

REVIEWS OF BOOKS

A dictionary of selected synonyms in the principal Indo-European languages. Carl Darling Buck. Chicago: University of Chicago Press. 1988. (Originally published 1949.) Pp. xvii, 1515. $29.95.

Reviewed by ALAN S. KAYE
California State University, Fullerton

All Indo-Europeanists, most historical linguists, and many lexicographers and general linguists know this book written by Carl Darling Buck (1866-1955), a distinguished historical linguist who was for many years a professor of comparative philology (the older name for genetic linguistics) at the University of Chicago. As the title indicates, the book (now for the first time in paperback and at an affordable price) is an arrangement of more than 1,000 groups of synonyms from the major Indo-European languages listed according to semantic class exposing what Philip Baldi has called (on the book's back cover) the 'Indo-European cultural lexicon'.

One major advantage of the work is that one can tell immediately which lexemes have been replaced or discontinued. As Buck explains (p. x), the old words for 'eat' have been replaced by others such as 'chew' or 'nibble'. One of the most intriguing examples of this concerns the world of animals ('deer', e.g., originally just meant any animal). For instance, Proto-Indo-European **ek̑wo-*'horse' (p. 167), whose root connection is obscure, says Buck, shows up with the normal Indo-European phonetic developments in Greek *hippos* and *hikkos* (dialectally), Latin *equus*, f. *equa* (='mare'), Irish *ech*, Old English *eoh* 'war-horse', Lithuanian *ešva* ~ *ašva* 'mare', Sanskrit *açva*, Avestan and Old Persian *aspa-*, and Tochanian A *yuk* and B *yakwe*. Buck tells us (p. 168) that in all the European languages it was displaced, e.g., Vulgar Latin *caballus*, originally 'gelding, work horse' displaced *equus* giving Italian *cavallo*, French *cheval*, Spanish *caballo* and Rumanian *cal*. The reader will note that English *horse*, German *Pferd*, and Russian *lošadʲ* come from other sources.[1]

The *Wörter und Sachen* (= words and things) linguist and the ethnologist/cultural anthropologist, to mention but two specialists,

have particularly profited from this work since it originally came out in 1949. As Buck himself notes in his general discussion of some semantic notions (p. vii), many of the Indo-European words for 'pen' (i.e., the old quill type) derive from Latin *penna* 'feather'. The semantic connection here is obvious to any trained linguist and need not be dwelt upon. However, in a great many other cases, the semantic evolution is not obvious as, for instance, in the word 'rubber' (ibid.) the "material [is] named after its early and now insignificant use in **rubbing** (emphasis mine) out pencil marks."

The relevance of Buck's book for today's linguist is, I think, more to test our ideas of language evolution than in researching comparative-Indo-European, both in the domain of lexical semantics as well as in phonology. As any linguist will observe by even a cursory glance through a lifetime of lexicographical and etymological research, this book belongs to a very different era of linguistic research. The project was already announced in *Language* 5:215 ff. (1929) and was not published for two more decades. It should be clear that one does not rush into print with research projects such as these. The abbreviated references (pp. 2-7) will easily convince anyone that Buck read widely--everything from the *Zeitschrift der deutschen morgenländischen Gesellschaft* to the *Journal of the American Oriental Society*.

A look through this elegant tome points to the conclusion that linguistics for Buck and his contemporaries was fundamentally the study of language and languages with all their messy and fuzzy historical details. How the field has changed! Many, or perhaps most linguists today see linguistics as a branch of cognitive psychology and/or applied mathematics (=Chomskyanism), but the kind of linguistics represented by Buck's comparative dictionary is still both relevant and important.[2]

Wouldn't it be great to have a volume like this for other language families? I believe we should once again continue Buck's work by adding the so-called minor Indo-European languages which he did not cover (Albanian, Armenian, etc.) as well as include the modern Indo-Iranian languages, and so on. Furthermore, we should also continue where he left off in another sense, by encouraging today's linguists to start producing volumes like this for Afroasiatic, Austronesian, etc. As research tools for future generations, they will be invaluable.

NOTES

[1]There are very intricate problems involved sometimes with some particular notions demonstrating how advanced Indo-European comparative linguistics has become. Consider the following example. Apparently, the general Proto-Indo-European word for 'water' was **wedór*, **wodór*, or **uden-*, which yields English *water* and Hittite *watar*. However, Latin *aqua* 'water' goes back to Proto-Indo-European **akwā* or **akwā-* 'running water', which manifests itself, e.g., in Gothic *ahwa* 'river'. Persian *āb* 'water' derives from another Indo-European root ('personified Waters'), and I presume that other modern Indo-European languages use other roots. For example, Hindi-Urdu *pānī* [not mentioned by Buck] does not seem to be derived from Proto-Indo-European **āp*, Sanskrit *āp-* and *ap-*, cognate with Persian *āb* discussed above, and I have not researched its etymon. Another example is Modern Greek *nerō*, which derives from the Greek word for 'fresh' *nearòn*, as in 'fresh water'.

[2]It is fair to say that there are two fields, separate and distinct, both being called linguistics today. One is a data-oriented study of language and languages; the other is the study of the formal properties of language. Both of them have their devotees. ■

WORDS IN THE MIND: An Introduction to the Mental Lexicon. Jean Aitchison. Oxford: Basil Blackwell. 1987. Pp. x, 229. Paper $15.95.

Reviewed by KEN McDANIEL and ALAN S. KAYE
California State University, Fullerton

The well known author, Jean Aitchison of the London School of Economics has given us such classics as *Language Change* (1981), *The Articulate Mammal* (2nd ed., 1983) and the *Linguistics* volume in the *British Teach Yourself Books* series (3rd ed., in press). This volume, like the others, is well written and well researched and thus can be recommended for linguist and layman alike (although the latter might have some problem with a part of it). Its purpose is to provide a working model of the mind's memory storage system (for lexemes or words), and to investigate how they are retrieved from it. It seems improbable that words are stored in the brain randomly because of their large number and the speed at which they can be found (one-fifth of a second). All the available evidence points to the conclusion that they must be organized in 'an intricate, interlocking system whose underlying principles can be discovered' (p. 5). Some research indicates that educated adults store between 50,000 and 250,000

words, however, one often reads in various sources that the average (American, at least) adult has stored around 70,000 vocabulary items.[1]

As has already been mentioned, target words can be retrieved from the speaker's memory and recognized in one fifth of a second from word onset time. Non-words are rejected in about half a second. Therefore, the human mental dictionary or 'mental lexicon' must be highly organized and systematically structured. By the speed with which words can be changed in mid-stream, it may be that we also possess a mental thesaurus. According to Labov (1973:340), words are 'the most central element in the social system of communication.' As such, they have had a primary role in linguistic research for ages, along with sound production theories, syntax, and semantics. Witness the whole technique of *Wörten und Sachen* and etymology in general, as practiced by such experts as Yakov Malkiel, Wolf Leslau, and M. B. Emeneau.

Since 1957 with the publication of Chomsky's *Syntactic Structures*, as is well known, syntax[2] has dominated linguistic theory. Syntactic rules, allegedly, determine the grammaticalness of word combinations in sentences, or perhaps they are really semantic rules, which then undergo post-semantic processes (cf. Chafe [1970]). More recently, neuro-biological studies have focused upon the interdisciplinary aspects of behavior, perception, and memory, elucidating basic principles of organization and the interrelationships of brain networks for application to such fields as Artificial Intelligence and Natural Language Processing and Parsing.

The three main facets of words (phonology, semantics, and syntax) are investigated as well as how they are organized and stored, whether in whole or in part. How people cope with situations in which no relevant word is available, giving occasion to create a new one[3] or extend the function of an old one is discussed, followed by a review of the overall picture of the mental lexicon. This review concentrates on the chapters dealing with semantic theory (Chs. 4-7) and how they fit in with the fundamental organization of the mental lexicon (Ch. 17).

Three areas are brought to the reader's attention: **1) fixed vs. 'fuzzy' meaning, 2) prototype-semantic theories,** and **3) network theories**:

1) **Fixed-meaning** proponents assume that there is a basic meaning for each word. **'Fuzzy' meaning** followers, on the other hand, claim that words have unclear boundaries and rough semantic exteriors. Two problems are immediately encountered, viz., what is a word (ignored here), and what does 'meaning' mean? A complex relationship exists between a word and the thing it labels. Aitchison assumes that words and things are linked by concepts. But are they separate and abstract from meaning or are they identical with it? She also assumes that word-things are translated into concepts, which represent things in the external world fairly well, although there is some overlap between meaning and concept or what linguists usually call conceptual structure.

Fixed-meaning proponents also argue that there are necessary and sufficient conditions which constitute meaning. When combined, these conditions define and identify it. Essential characteristics exist for each word, supposedly, which are critical to it. This point of view presents two inherent problems: a) it is difficult to decide what is essential or non-essential for inclusion in the list of characteristics, and b) some things do not seem to have any necessary pre-conditions. For some words, then, it is difficult to identify a fixed semantic root or sememe. These are but some of the problems with so-called objectivist semantics.

'Fuzzy' meaning proponents, on the other hand, claim that words demonstrate 'fuzzy edge phenomena' and 'family resemblance syndrome'. In the first, it is difficult to draw the line where the meaning of a word begins and ends: at the addition of which dollar does one cross over the line from poor to rich? Or from rich to wealthy?

The 'family resemblance syndrome' is best illustrated by Wittgenstein's famous example of 'games'. In listing and comparing various games, what is found in common but similarities and relationships? Most words, thus, have 'fuzzy' meanings, with a built-in range of overlap. Word meanings change with use, user, and diachronically as well. Each word has its own value system which fluctuates according to the need of the communication event. Logophobes are highly critical of the sloppiness of some words and demand the precision of use of the specialist. Berlin and Kay (1969) and others illustrate the overlapping of color terminology from

language to language. Aitchison favors the 'fuzzy-meaning' theory, and we agree with her in that most words have 'fuzzy' meanings (p. 50): ' . . . words are indeed slippery customers, with vague boundaries and fuzzy edges.'

2) **Prototype-semantic theory** is one way of accounting for the general agreement shared over 'fuzzy' word meanings. Some instances of word usage are more normal than others. By analogy and reference to a norm, people cope with unusual or irregular uses of a word. Prototype-semantic theory, however, does not account for a speaker's ability to interweave identification criteria with stored data, nor does it account for prioritization features of a word class and knowledge of where one class ends and another begins. Prototypes facilitate communication by offering a point of reference for some sort of standard meaning.

3) Is there a core of semantic universals from which most words are derived, or are there semantic primitives? There are two opposing viewpoints on this issue: the **'atomic globule theory'** and the **'cobweb theory'**. Supporters of the former claim that there are about a dozen semantic primitives which form the basis of all verbs (in ordinary use). Most words, they argue, are built from a common pool of semantic bits. Some linguists, in fact, believe there is a universal core even though it has not yet been ascertained, and experiments have not proven that word bits are assembled during comprehension.[4] So far, atomic globule theories seem to provide some explanation of why some words overlap in meaning.

The alternative viewpoint claims that words are organized into semantic fields related by topic. This perspective has been supported by word association experiments in which subjects identify clusters of related words. Should one word of a word-pair (collocation) be asked, subjects usually provide the missing part. It has also been shown that adults usually respond with words of the same word class, i.e., nouns with nouns, adverbs with adverbs, etc. But these experiments do not reveal the probable structure of the semantic word-web network. Speech errors also clearly demonstrate that words are stored in a semantic framework.

There are four types of word fields: **coördinates**, **collocations**, **synonyms**, and **superordinates**. The first two represent strong

networking links while the latter two are weaker. Coördinates are words which group together on the same level of detail such as black/white, push/pull, and husband/wife. Collocations (as opposed to colligations) consist of words commonly or habitually associated with one another such as 'crack a smile', 'fly a kite', or 'drop a line'. Synonyms are words which are interchangeable (to a certain degree) such as funny, silly, crazy, nutty; or fishy, slimy, slippery, and sneaky, etc. Links between superordinates and hyponyms involve vertical classification as in kingdom, phylum, class, order, family, genus, species. Words can be selected from the mental lexicon by sound production according to word beginning, word end, or selected by a semantic field. Frequently used words are recognized faster, however, there is evidence that many words are considered simultaneously before narrowing down a particular choice. Aitchison's preference leans towards the cobweb theory of a semantic networking.

Comprehension depends upon word meaning and word class recognition. 'Fuzzy' meaning, prototype-semantic, and cobweb semantic theories support the open-ended, creative and productive aspect of language of which the mental lexicon is a major subsystem.

The mental lexicon is a mixed system which compromises the semantic and phonological components making words, in general, easier to remember. Human cognitive abilities and memory team up with these components plus general syntactic or semantic rules to form an organized, highly complex word-storage system. This network also contains evolutionary artifacts. Along with analogy and a back-up store of morphemes and word segments, these components can be combined to create new words or word extensions.[5]

Words are closely linked by coördination and collocation. All of these features and word search processing techniques combine to form the architecture[6] of the mental lexicon. Word-search processing involves searching through multiple meanings and similar sounding words, sweeping through many more words than are needed, narrowing the semantic and phonological fields, and filtering out unwanted words until the proper word is finally selected. Efficient organization and a normal human memory capacity ensure that word-searching can be accomplished in seconds, allowing for speedy retrieval. The relative ease with which this system is learned is more evidence in support of an innate vocabulary capacity and language acquisition device.

Finally, some remarks on the style of this book are in order. Aitchison writes in an entertaining manner, presenting opposing theories and providing examples for differing sides from many interdisciplinary sources. For this reason, her bibliography deserves a good review. Many analogies throughout the book contribute to its readability. Discussion of the pros and cons of each theory provides a convenient summary at the end of each chapter.

In conclusion, this is an excellent introduction to an area of linguistics and cognitive science (psychology) which deserves to be in the forefront of current linguistic research.[7]

REFERENCES

Berlin, Brent, and Paul Kay. 1969. *Basic color terms: Their universality and evolution.* Berkeley and Los Angeles: University of California Press.

Chafe, Wallace L. 1970. *Meaning and the structure of language.* Chicago: The University of Chicago Press.

Hockett, Charles F., and R. Ascher. 1964. 'The human revolution.' *Current Anthropology* 5:135-47.

Labov, William. 1973. 'The boundaries of words and their meanings.' In C.-J. N. Bailey and R. W. Shuy (eds.), *New Ways of Analyzing Variation in English*, pp. 340-73. Washington D.C.: Georgetown University Press.

NOTES

[1]Not only is this number somewhat controversial, but there is also really no evidence that this number holds true cross-linguistically. English, which is relatively well studied in comparison to many other languages, might have a larger number of words passively stored or actively used by its 'average' speaker. There is even evidence that English might be organized (cf. p. 205) differently *vis-à-vis* its mental lexicon than other languages because of the fact that most of its native speakers are literate, and visual representation may affect lexical storage capacity as well as retrieval.

[2]It has been more or less axiomatic in modern Chomskyan linguistics that language can be viewed similar to a house with words being like the bricks and syntax like the mortar. This book makes a solid case that although the emphasis has been placed on the mortar, the time is ripe to shift this and start paying attention to the nature of the lexicon (i.e., the bricks). One can enthusiastically endorse the author's claim (p. 26) that 'the findings of theoretical linguists . . . provide useful clues to the mental lexicon but need to be treated with caution.'

[3]We all know that new words come into existence through blending, which has interesting ramifications when considering the blending theory for the evolutionary development of the closed-call system, which eventually became an open-call one. Cf. Hockett and Ascher (1964) for the details. The process of blending figures into the mental lexicon of bilinguals as A. reports (p. 206) words such as *springling* 'spring' in the speech of German-English bilinguals (English *spring* + German *Frühling* 'spring'). We also surely agree with the author that one ripe arena for future research is in the area of bilingualism (and certainly also multilingualism).

[4]One such universal sememe proposed is the idea of MOVE. One runs into trouble with this assumption because although many linguists have claimed that there are two basic sememes in KILL (= CAUSE + DIE), there is no evidence which justifies this from the point of view of language processing.

[5]Existing words have 'normal' semantic features or satellites with flexible boundaries allowing for overlapping of meaning without sacrificing aspects of communication.

[6]The author gives the beautiful analogy of looking at the plans for the London Underground system, a marvel of Western architecture, and the model of the mental lexicon.

[7]It is well known that the field of semantics needs a good non-technical or semi-technical introductory textbook. Although the work under review does not comprehensively cover the entire field, it may conveniently serve as such. It will surely get the student interested in lexical semantics; the student who wants amore advanced treatment of the subject may consult John Lyon's two-volume text *Semantics* (Cambridge University Press, 1977), or the two volumes by Keith Allan, *Linguistic Meaning* (London, Routledge and Kegan Paul, 1986). Neither of these, incidentally, are in the author's bibliography. ■

ERRATA

Correction to *Special Consideration for Creole Surveys* by Barbara F. Grimes, in NOL #47

Figure 2 on page 46 (NOL 47) was badly garbled making it unintelligable. We apologize to the author and to our readers for this error. The following is a corrected version supplied by the author:

	Basilect	Mesolect	Acrolect
1	All Domains		
2a	Mother tongue (Home, 'Low')	('High')	
2b	('Low' except home)	Mother tongue (Home, 'High')	
3a	Mother tongue (Home, 'Low')	('Higher')	('Highest')
3b	('Lowest')	Mother tongue (Home, 'Lower')	('High')
3c	('Lowest')	('Lower')	Mother tongue (Home, 'High')
3d	('Lowest')	('Lower') *Fluent in all varieties as appropriate.*	('High')
4a		Mother tongue (Home, 'Low')	('High')
4b		('Low' except home)	('High')
5		All domains	
6			All domains

Figure 2

Domain Use by Various Speakers along a Post- Creole Continuum.

■

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* * * * * *

Some have reported difficulty in getting end notes to be placed at the end of the division with WORD 5.0. Cured in the modified version above and in version 5.A available from Microsoft by registered owners.

NOTES ON *LINGUISTICS*

NUMBER 50 AUGUST 1990

CONTENTS

COOORDINATOR'S CORNER Eugene Loos 3

ARTICLES

TEXT-BASED LANGUAGE LEARNING Harriet Hill 4

LANGUAGE LEARNING TIPS Alec Harrison 9

LEXICAL PHONOLOGY AND THE REBIRTH OF THE PHONEME Paul Kroeger 11

USING BOOKMARKS AS CROSS REFERENCES IN WORD Bryan Harmelink 25

ROUNDTABLE: COMPUTER TRAINING FOR LINGUISTS 34

COMPUTER TRAINING AT SIL SCHOOLS Geoffry Hunt 35

USING SHOEBOX IN A LINGUISTIC FIELD METHODS COURSE Ginger Boyd 37

REVIEWS

EAST MEETS WEST: HOMAGE TO EDGAR C. KNOWLTON, JR., ed. by Roger L. Hadlich and J.D. Ellsworth Alan Kaye 39

PATTERN, THINKING, AND COGNITION: A THEORY OF JUDGMENT, by Harold Margolis Charles Peck 43

THE BODY IN THE MIND: THE BODILY BASIS OF MEANING, IMAGINATION, AND REASON, by Mark Johnson Thomas E. Payne 47

ANNOUNCEMENTS

BOOKS AVAILABLE FOR REVIEW 63

P 35 .A1 N68

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COORINDATOR'S CORNER

We have often heard testimonials to the value of listening continuously to recordings of text material as a device in language learning, but without accompanying rationale and suggestions. Harriet Hill in *Text-Based Language Learning* gives us an insight into a way of tape listening that is an important strategy in language acquisition: it is an alternative to the LAMP method.

Interaction with speakers is vital too, but when native speakers adapt to the learner's limitations, as a friend is likely to do, the learner's progress can be impaired. Solution? A suggestion from the field: Alec Harrison, *Language Learning Tips*.

Paul Kroeger's readable *Lexical Phonology and the Rebirth of the Phoneme* clarifies the differences as well as the similarities between traditional phonemics and Lexical Phonology. That, however, was not what gave me pause for thought as I read his article. LP claims that word formation is done by rules in the lexicon and that phonological rules that apply in the lexicon have different applicational characteristics from the rules that apply after the words have been formed. My thoughts jumped immediately to agglutinative languages.

Agglutinative languages typically pack numerous morphemes into strings, making long words. This often produces considerable alternation. But, apart from stress or tone placement, the word borders might not play a heavy role in the phonology. The challenge is to check his interesting article, asking yourself if your language offers corroboration or refutation. Write it up.

When I scanned the manual for WORD 5.0 and came across the section on **document linking**, used for bringing spreadsheet data into a display document, I moved on to find things of more immediate usefulness to linguistic applications. Yet from that very section Bryan L. Harmelink, *Using Booknarks as Cross References in WORD* found a solution for the linguist who wants to number linguistic examples automatically in a description and then refer to those examples by number, this without ever having to renumber either the examples or the references, despite shifting them around in the text. As a bonus, he describes a way to prepare handouts for a linguistic meeting which can be automatically updated from the master document. He shows how this same technique can be used to automatically update examples in linguistic descriptions. That is something that I want!

—Eugene Loos

Text–Based Language Learning

HARRIET HILL

Learning to speak an unwritten language is a challenge. Language learners are generally thankful for any help, advice, or models that are available as each has something to contribute. In my experience with learning two languages in Cóte d'Ivoire, I have found a text–based model to be most effective. In this article, I will first describe the model and then discuss the benefits of this model.

TEXT–BASED LANGUAGE LEARNING, THE METHOD

This method begins with the recording of short texts. The texts should be of various genres: stories, first person narratives, third person narratives, procedural texts, dialogues, etc. Some of our most helpful texts were recorded on our patio while people visited. Others were recorded in church, in the village, or in response to a question we asked. After recording the text, it is transcribed, glossed, and given a free translation with the help of a language assistant. The vernacular is used as much as possible, but a trade or national language can be used when necessary to expedite the process. The grammatical analysis necessary for language learning is done. Clause types, sentence types, and propositional relations are recorded and cataloged. These can then be used as the models for drills, eliciting several examples of each type. Texts can be used for passive listening or memorized. As the language learner improves his or her language ability, he or she can take a more independent role in the transcription and glossing of texts, checking with a language assistant for accuracy.

Texts give real language data, with all its messiness and loose ends. This can be considered a disadvantage, but it is, after all, what you'll be hearing when you talk to people.

Short texts are the key. It doesn't matter how long it takes to exploit a text for all it's worth. The goal is not to build a voluminous text collection. You can learn a great deal about the language from a short, one page text.

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TEXT-BASED LANGUAGE LEARNING, THE BENEFITS

The primary benefit of the text-based model is that one starts off learning natural language data. One of my frustrations in language learning was that, after having worked diligently to elicit and memorize certain phrases, I found out that a person **could** say the phrases in the vernacular, but no one would ever say them like that. Discourse studies are important for translation and linguistic research, but they are also indispensable to language learning.

The problem with the extensive use of non-text-based language learning models is that we risk imposing the structures and categories of our mother tongues onto the target language. We elicit the vernacular equivalent of phrases we would say in our language; we fill in the blanks. But:

> "in order to comprehend a language fully, one must share in the culture of the people who speak it. Foreign languages are not alternative codes for the familiar American reality" (Brown, 1953:1214).

Languages encode different cultural realities, different perceptions of the universe, and sometimes almost different universes (fields and spirits verses subways and malls). Reality is classed into different categories, different modes of interaction are employed, and different structures are used.

The realization that people do not speak in isolated sentences is basic to the text-based model. They speak in discourses. Knowing the structure of discourse particular to the language is a key to being able to comprehend and communicate in that language.

In Adioukrou and Anyl, a wealth of discourse discoveries helped me learn the language. For example, frontshifting and focalization are uncommon in English. If I elicited sentences in isolation, I would never have realized how frequent and essential these structures are to these African languages.

The sentence "*Mel ate bananas*" could be elicited as such. But it is unlikely that in natural text it would occur in that form. It would be "*Mel, he ate bananas*", or "*Bananas, Mel ate them*", or "*Eating, mel ate bananas*", or "*It was bananas that Mel ate*", or "*It was Mel that ate the bananas*." If a foreigner were to speak Adioukrou without using

frontshifting and focalization, all the words and pronunciation might be correct, but the structures would not be natural, and the Adioukrou would have a hard time understanding the meaning.

Retelling events or stories requires a familiarity with discourse structure. Both Adioukrou and Anyl use considerable back–referencing, for instance, *"His work was cutting palm trees for wine. The palm tree that he cut, it... "*. Events are linked together more explicitly than in English, especially time and location changes. You would not say, *"He went to town and bought some sugar"* in Adioukrou, although I'm sure you could elicit this sentence in isolation. It would be far more natural to say *"He went to town, (until) when he arrived there, then he bought some sugar"*. The linking of events in this way is particularly crucial in procedurals: *"Plant the field. When you have planted the field, make a hedge around it. When you have made the hedge,... "*. Not employing this structure might explain why our seemingly clear instructions given in the vernacular aren't always followed very well.

The use of verb tenses and aspects become clearer in the discourse setting. Certain verb forms are used in subordinate clauses, others in principal clauses. Some are used for main–line events, others for collateral, background, or hypothetical material. The flow of the discourse unlocks the key to the verbal system. Trying to analyze clauses in isolation or to make our verbal categories fit just doesn't work.

There are surprises in discourse studies. In Anyl I discovered a verb aspect that is used to mark pivotal and peak events. It signaled that the clause was very important to the development of the story. In Adioukrou, I discovered a whole set of pronouns reserved for reported speech and a semi–direct speech style. I would never have found either of these categories in elicited data, because English doesn't have these categories and I wouldn't know enough to ask about them. I would not have discovered them in isolated sentences, because they only manifest themselves in larger speech units. Mastery of reported speech pronouns and semi–direct style is essential for communication in Adioukrou, not an optional embellishment.

People don't speak in non–related clauses. They use hypothetical conditions, logical conditions, contrast, etc. The text base provides a natural setting for the propositional relations of the language to

occur. Eliciting translations of English propositional relations doesn't suffice, because each language has its unique set of propositional relations. One such category in Anyl and Adioukrou we've labelled EVENT–UNEXPECTED EVENT, marked by its own conjunction. By learning the propositional relations in this way, I have a good start on several grammar papers as well.

Passively listening to texts provides an opportunity for saturating the mind with the melody and tonal patterns of the discourse. For those of us whose mother tongues are non–tonal, this repetition is necessary to get a grasp on this new, very significant category.

The differences between the fill–in–the–blank model and the text–based model are not only structural. There are significant differences in semantic categories as well. There are categories in Adioukrou for which we do not have an English equivalent, such as "*mupl*" the area of land between the village and the fields. Some of these are concrete items, but there are also cultural events and ideas. There are all sorts of mismatches between the English verbs and Adioukrou verbs. Some actions we do not have at all, like "*ayu*", the action of jiggling grated manioc in a way that, by centrifugal force, the larger grains go to the lower right corner of the special shallow basket while the smaller...; I think you'll only understand if you see someone *ayu*–ing! You can't elicit these words, because you don't know what to ask about. If you stumble across them in isolation, the language assistant may be hard put to explain the meaning. In the context of the discourse, the meaning is often easier to determine.

What you talk about also differs. To walk up to a stranger and say, "*Hello, this is my third day learning Adioukrou. This is all I can say. Good–bye*" is certainly possible, but not natural. It could send a loud para–message, "this person is strange". Greetings involve a lot of hand–shaking, first news and second news, and then the real motive of the visit. When speaking with Americans after a long stay in the village, I often mistakenly begin the conversation with "Let me give you my news", in good African style. They invariably conclude I'm going to announce that I'm pregnant. The words are English, but somehow it is not quite natural.

Some of our fill–in–blank dialogues probably have the same effect. Using Adioukrou words and Adioukrou structures is not enough; I need to "build" my message in a culturally appropriate way. In

Adioukrou, this requires a much less direct approach to the topic. The illustration given to me was, "You don't go directly to the compound with the palm wine. You visit all the compounds around it and gradually stumble across the compound with the palm wine." Conversations follow that tact. In discussions, people speak in turn. No matter how idiotic the reasoning of the person who spoke just before you, you always begin your tirade with a flowery, flattering thanksgiving for the wisdom that was just expounded. This goes on for a good bit, and then you say, "There's just one thing." At that point you say what you really think, often in direct opposition to the former speaker. In contrast, when you want to make a polite request, you use the imperative, which rubs Westerners as abrasive, haughty, and most impolite.

What to talk about and how to go about talking about it is all wrapped up in texts. Whether you're able to focus on these issues at first or not, you are absorbing the notions by exposure.

CONCLUSION

Adioukrous are not basically just Westerners who happen to use different words for things. The language represents a whole different perception and categorization of reality. Learning a language is more than substituting vernacular words for English words. It is submerging yourself in another cultural reality. Basing your language learning efforts on natural text will allow you to learn the semantic categories of the language and culture, the structure of larger speech units, and culturally appropriate ways to express yourself. It's a good investment of your language learning energies.

REFERENCES

Brown, Roger et al. Developing Cultural Understanding through Foreign Language Study. Publications of the Modern Language Association 67. 1214.

Burmeister, Nancy. 1980. How to Break the Deadlock in Language Learning. Notes on Linguistics 14. 10–14.

Brewster, E. Thomas and Elizabeth S. 1976. Language Acquisition Made Practical. Colorado Springs: Lingua House.

Healey, Alan, ed. 1975. Language Learner's Field Guide. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics. ■

Language Learning Tips

ALEC HARRISON

Greetings from Cuiabá, Brazil. I am writing this in response to Eugene Loos' request in Coordinator's Corner for tips on language learning.

I have two tips to help one in language learning. The first is:

A. **Do not get bogged down with using only one or two language helpers, especially when it comes to conversation practice.**

I know this has been stated before, but cannot be emphasized enough. This can be stated another way:

(A). One of the best ways to give your overall language learning a shot in the arm is to get away from those you spend the most time conversing with, and practice with someone else; and if possible, in a different geographical location.

Reasons:

1. You run out of things to talk about with the same people. New people open up new possibilities for conversation.

2. Your "old faithful" language helpers have learned to live with your mistakes and no longer correct your pronunciation and grammar, and many have just grown tired of correcting you at all, or even making an effort to give you alternative ways of saying things, etc.

This has been the single most encouraging factor in my learning of the Xavante language. We live in a village surrounded by 35 other Xavante villages. I look forward to visiting these other villages from time to time (on a motorcycle), and always come back very encouraged about language learning. Speaking with people I have never even seen before reminds me that I have indeed come a long way from the first phrases mumbled in the language. I find it exciting to practice on "virgin" ears, and get new and often very valuable reactions/corrections.

My second tip is:

B. **From the first day you set foot in your new language learning environment, be alert for how kinship/respect/honorific relationships may affect how certain people communicate with others in the community.** (In other words, anthropology feeds directly into language learning).

For the first six months of our tribal living, we studied the "standard" usage of the Xavante verbal system, and we were making fair progress. But every once in awhile I noticed that my comprehension level of a conversation would suddenly drop from about 90% to almost zero, from one sentence to the next. But it usually happened when a certain person walked in and joined the conversation.

I came to find out that Xavante has a complex system of Honorifics/Respect, in which the standard set of person prefixes and other verbal morphemes are replaced by other morphemes, and which set of morphemes one uses is determined by what your relationship is to the person you are talking to or talking about.

The point is, we were never going to learn to speak Xavante in a culturally relevant way without having gotten right into the kinship system early on. After making this discovery and figuring out which set of morphemes to use in which situation, our comprehension of Xavante took a giant leap! ■

Lexical Phonology and the Rebirth of the Phoneme[1]

PAUL KROEGER

In the past 15 years or so, a number of traditional concepts have been re–introduced into current phonological theory. One could point to the development of metrical phonology based on the traditional notions FOOT and METER, work in prosodic phonology based on a hierarchy of phonological units, and the autosegmental development of Firthian "prosodies".

This paper examines another such example, the re–emergence (in the theory of Lexical Phonology) of a level of representation similar to the classical phonemic level of American Descriptivism. The analogy between the descriptivists' phonemic level and the output of the lexical component in Lexical Phonology (LP) has been frequently noted. The goal of this paper will be to clarify the differences as well as the similarities between the two, and to give some historical perspective on the issues involved.

As Mohanan (1986) points out, the core intuition behind the definition of the phoneme was that speakers of a language react to some phonetic distinctions while ignoring others:

> "Broadly speaking, the classical phonemic level of representation arose out of the speaker's intuitions about what he was saying or hearing, or what was significant in it. This level was meant to capture the speaker's intuitions about which sounds were the same or different: thus, speakers of English judge [t] and [t^{h}] to be the same, while they judge [t] and [s] to be distinct.
>
> ... Lexical Phonology tries to regain what was intuitively true about the classical phonemic representation." (pp. 6–7)

The crucial difference between the descriptivist phonemic level and the level of "Lexical Representation" in LP is the requirement in the former of a biunique mapping between phonemic and phonetic representations. This difference in turn follows from basic differences in the theoretical assumptions of the two frameworks. The descriptivists sought to define an inventory of units, and to describe

the distribution of these units. If two units (e.g. two phonemes) were shown to be significantly different in one environment, they had to be considered distinct in all environments.

Lexical Phonology, on the other hand, seeks to determine a system of **rules** which will determine the surface forms of a language in a maximally efficient and elegant way. Rather than distinguishing between two kinds of units (phonemes vs. morphophonemes), LP distinguishes between two modes of rule application: lexical (word–level) vs. post–lexical (phrase–level or syntactic).

The classical phonemic level corresponds roughly to the output of the word–level phonology and the input to the phrase–level phonology.

1. OVERVIEW OF LEXICAL PHONOLOGY

Some phonological processes apply strictly within words, while others may apply either within words or across word boundaries. The basic claim of LP is that there are certain characteristic properties that distinguish word–bounded rules from non–word–bounded rules, and that all word–bounded rules must apply before the non–word–bounded rules.

The **lexicon** is viewed as the component of the grammar in which words are formed. Both morphological and phonological processes take place within this component. Within the LP model, these morphological and phonological processes are "interleaved": some phonological rules (**lexical** rules) may apply after each successive morphological operation. This is a radical departure from previous (and many current) theories, which assume that all morphological processes must precede all phonological rules.

The output of the lexicon is a word. Rules of syntax combine words into phrases, sentences, etc. after which another set of phonological rules (**post–lexical** rules) may apply. In many cases the same rule may apply both lexically and post–lexically, but the application of the rule is subject to different constraints in the two modules.

Kaisse and Shaw (1985) summarize the differences between lexical and post-lexical applications of phonological rules as follows:

(1) Lexical rules never apply across word boundaries, whereas post-lexical rules may apply both within words and across word boundaries.

(2) Post-lexical rules are exceptionless. They apply wherever their structural description (i.e. conditioning environment) is satisfied. Lexical rules, however, often have marked exceptions.

(3) Lexical rules are **structure preserving**, i.e. they do not create segments not present in underlying forms in that language. Post-lexical rules may create "novel" segment types. Another way of stating this is that lexical rules change one "phoneme" into another. They cannot modify non-distinctive features. Post-lexical rules, on the other hand, may modify both distinctive and non-distinctive features.

(4) Lexical rules are **categorical**, but post-lexical rules may produce **gradient** (non-binary) outputs.

(5) Lexical rules apply only in derived environments (e.g. across morpheme boundaries), while post-lexical rules may apply in underived environments (e.g. morpheme-internally).

(6) Post-lexical rules can never apply cyclically, whereas most lexical rules are cyclic. Post-lexical rules can not be sensitive to morphological structure.

Strictly speaking, rules themselves cannot in general be classified as being LEXICAL or POST-LEXICAL. As noted above, a single rule may apply both lexically and post-lexically. The term LEXICAL RULE is thus a shorthand way of referring to the application of a given rule in the lexical component of the phonology. Counter-examples to several of the generalizations listed above have been proposed in the literature; see, for example, Mohanan and Mohanan (1984). But even those that have been challenged hold at least as strong tendencies.

Within the lexicon, morphological processes often seem to cluster together both in terms of relative position of affixation and in the phonological rules which apply to the output of each morphological process. Such clusters define "strata" or levels of morphology, which are assumed to be linearly ordered with respect to each other. Lexical phonological rules may be restricted to apply only in specific strata.

For example, the agentive/instrumental suffix *-er* in English has different phonological effects than the homophonous comparative suffix. The /g/ in stems ending in /-ng/ is silent before the agentive suffix, just as it is in word-final position: *singer*, *hanger*, *stinger*,

bringer. The same pattern holds in compound words: *long-eared*, *hangout*, *singalong*. However, before the comparative *-er* the /g/ is pronounced, as in morpheme-internal /-ng-/ clusters: *longer*, *stronger*; compared with *hunger*, *finger*, *anger*.

Sapir (1925), to whom this contrast was pointed out by Bloomfield, said: "[Agentive] *-er* might almost be construed as a 'word' which occurs only as the second element of a compound...". In Lexical Phonology, this same intuition is captured by assigning the comparative and agentive suffixes to different strata. The comparative suffix would be added in the first stratum, the agentive suffix in the second stratum, the same stratum where Kiparsky (1982) suggests that compounds are formed. The rule of final /g/-deletion in /ng/ clusters could apply in stratum 2 and post-lexically, but not in stratum 1.

Ignoring other phonological and morphological processes, the organization of the rules in question would be as shown in Figure (1). Some sample derivations are shown in Figure (2).

Figure (1)

	Phonological Rules	**Morphological Rules**
Lexicon:		
Level 1:	Nasal Assimilation (NA)	Comparative formation (CF)
Level 2:	Final *-g* deletion (FGD)	Compounding (CMP) Agentive formation (AF)

Figure (2)

UR:	/long/	/long/+/-er/	/anger/	/sing/+/er/	/hang/+/out/
Level 1:					
NA:	longg	longg	angger	singg	hangg
CF:	—	longg+er	—	—	—
Output:	long	longger	angger	singg	hangg
Level 2:					
FGD:	lon	—	—	sin	han
CMP:	—	—	—	—	han+out
AF:	—	—	—	sin+er	—
Output:	[lon]	[longger]	[anger]	[singer]	[hangawt]

(Note: vowel quality and other phonological processes ignored here)

As the figure shows, the /g/ in morpheme–internal clusters (*hunger, finger, anger,* etc.) is never deleted because it is never final. The /g/ in clusters which precede the comparative *–er* (longer, stronger, etc.) is final only entering stratum 1. By the time the rule of final /g/–deletion can apply (stratum 2), this /g/ is no longer final, and thus it is never deleted. But the /g/ in clusters which precede the agentive *–er* (singer, hanger, etc.), as well as in compound forms (long–eared, hangout, etc.), is final until stratum 2. If final /g/–deletion is ordered to apply before *–er* suffixation and compounding, the correct pattern is predicted.

The number of strata and the manner in which phonological rules are related to particular strata are points of contention between different versions of the theory (Kiparsky 1985; Mohanan 1986). But such differences will be irrelevant for our present purposes.

The organization of the LP model can be diagrammed as follows:

(3)

Underlying Representation (UR)
↓
morphology; Lexical application of phonological rules
↓
Lexical Representation (LR)
↓
syntax; post-lexical application of phonological rules
↓
Phonetic Representation

The term LEXICAL REPRESENTATION (LR) refers to the output of the lexical component. In searching for analogies to earlier work, it is natural to think of UR as corresponding to morphophonemic representation and LR as corresponding to phonemic representation. Since morphophonemes were never as rigidly defined as phonemes, the former comparison seems unproblematic. However, there are important differences between LR and the classical phonemic level. As stated above, the most obvious difference relates to the biuniqueness condition of descriptivist phonemics.

2. CLASSICAL PHONEMICS AND BIUNIQUENESS

In referring to the post-Bloomfieldians, there are two reasons to prefer the term "American Descriptivists" over the term used by Chomsky, "American Structuralists". First, it seems helpful to distinguish this particular school from other structuralist approaches, both European and American, including Chomsky's own. Secondly, it seems preferable (out of courtesy if nothing else) to use autonyms rather than exonyms wherever possible, and the term descriptivist seems to have been a term of self-reference for this group; witness the following infamous quote from Joos (1957):

> "An older term for the new trend in linguistics was 'structural'. It is not idle to consider how the term 'descriptive' now came to replace it, even if not all the reasons can be identified. The Sapir way of doing things could be called structural, but the term was more often used for the stimulating new ideas that were coming out of Europe, specifically from the Cercle Linguistique de Prague. American

> linguistics owes a great debt to that stimulation; but in the long run those ideas were not found to add up to an adequate methodology. Trubetzkoy phonology tried to explain everything from articulatory acoustics and a minimum set of phonological laws taken as essentially valid for all languages alike, flatly contradicting the American (Boas) tradition that languages could differ from each other without limit and in unpredictable ways, and offering too much of a phonological explanation where a sober taxonomy would serve as well.
>
> Children want explanations, and there is a child in each of us; descriptivism makes a virtue of not pampering that child." (p. 96)

The requirement of biuniqueness in phonemic representations was an innovation of the descriptivists. It was not characteristic of "the Sapir way of doing things". Sapir's guiding principle was that the phonemic representation should match the speaker's intuitions (Sapir, 1933). Even Bloomfield did not require strict biuniqueness, which prompted the following comments from Joos (1957):

> "When we look at Bloomfield's work, we are disturbed at this and that, but more than anything else Bloomfield's confusion between phonemes and morphophonemes disturbs us. Bloomfield kept himself out of trouble here, usually, by describing just one language at a time, or one area within each at a time, adjusting for the effects of the confusion. But it made his procedure an unsafe model for neophytes and made the corpus of his work an inadequate source to distill procedural theory out of." (p. 92)

The final line is crucial to understanding the descriptivist approach. Their fundamental goal was to develop a **procedural** theory, i.e. a theory which would allow for **operational** definitions of linguistic concepts. This goal, while quite different from current attempts to derive linguistic principles by deductive reasoning from *a priori* assumptions, is not inherently unreasonable. However, the goal of "operational definition" of the phoneme turned out to conflict with the original concept of the phoneme as capturing speakers' judgements of identity vs. contrast.

The principle of biuniqueness was first stated by Bloch (1941). Bloch's goal was to make explicit the difference between "**partial overlap**", i.e. two distinct phonemes sharing a common allophone in distinct environments, vs. "**complete overlap**", in which two distinct phonemes share a common allophone in the same environment. Partial overlap was permissible in phonemic representations, but

complete overlap could only be treated as morphophonemic variation between distinct phonemes.

The classic example of complete overlap concerns vowel length in Bloch's own dialect of American English. Bloch describes a productive allophonic rule which lengthens vowels before voiced consonants, as in:

(4)	beat	[bit]	bead	[bi:d]
	bit	[bIt]	bid	[bI:d]
	bet	[bEt]	bed	[bE:d]
	bat	[bæt]	bad	[bæ:d]

The same rule applies to /a/, as in *pot* [pat] vs. *pod* [pa:d]. Thus Bloch states: "The vowel of *pot* is affected by the same automatic alternation..." However, in his dialect there are environments in which length is contrastive for /a/. Bloch cites a minimal pair, *bomb* [bam] vs. *balm* [ba:m]. Other examples of the short vowel are found in *bother* and *sorry*, in contrast to the long vowel in *father*, *starry*, and *pa*. This means that /a/ and /a:/ must be distinct phonemes. Bloch shows that this analysis would lead to assigning the same phonetic segment ([a:]) to different phonemes in the same environment: the [a:] in *pod* would be allophonically related to /a/, whereas the [a:] in *pa'd* would be a realization of /a:/. This violation of the biuniqueness principle forces Bloch to treat every occurrence of [a:] as belonging to the phoneme /a:/. If the length contrast between *pot* /pat/ and *pod* /pa:d/ is to be expressed as a phonological alternation, it can only be stated as a morphophonemic process.

This points out a crucial difference between the LR and the classical phonemic representation. The phonemic level was defined in terms of surface contrast. Any process that related two contrastive items had to be morphophonemic, whether or not the alternation was automatic. While the distinction between contrastive and non-contrastive features is important in LP, the distinction between automatic and non-automatic alternations is more fundamental in defining the level of Lexical Representation. Only lexical rules can have lexical exceptions. A rule which neutralizes a phonemic contrast (e.g. final devoicing in German) may nevertheless be post-lexical as long as it is automatic (i.e. exceptionless).

Bloch 's motivation for accepting this unsatisfying analysis was to preserve the transparency of "writing" rules, allowing the phonemic

representation of an utterance to be absolutely predictable from phonetics alone. As he wrote in the last paragraph of his paper:

> "... by sacrificing this symmetry we are able to account for all the facts of pronunciation, which is surely the more important requirement. The resulting system is lopsided; but the classes it sets up are such that if we start from the actual utterance of the dialect we can never be in doubt of the class to which any particular fraction of the utterance must be assigned."

3. THE DEMISE OF THE PHONEME

Chomsky (1964) used Bloch's data as important evidence against the existence of a phonemic level. Of course, to even pose the question in these terms is to risk a serious anachronism. The generative concept of a LEVEL as a stage in a derivation was totally foreign to the descriptivist approach. However, the point of Chomsky's criticism was this: data like that presented by Bloch calls into question the rationale for distinguishing between allophonic and morphophonemic rules.

Chomsky's underlying assumption is that the human mind seeks maximal generality. This implies that an optimal grammar is one which contains the least possible redundancy. Grammars should not contain two different rules which accomplish the same thing in the same environment (e.g. both an allophonic and a morphophonemic rule to lengthen vowels before voiced consonants). The fact that the biuniqueness requirement prevented Bloch from adopting the least redundant analysis makes it unlikely (at least in Chomsky's view) that this requirement has any psychological reality.

Another key example cited by Chomsky was Halle's (1959) analysis of voicing assimilation in Russian. Halle points out that the process which changes [t] to [d], [p] to [b] and [k] to [g] before a voiced obstruent seems identical to the process which changes [č] to [dž] in the same environment. However, voicing is contrastive for stops. Thus /p/ vs. /b/; /t/ vs. /d/; and /k/ vs. /g/ are all distinct phonemes. The voiced affricate [dž] on the other hand is not a phoneme in its own right; it arises only as an allophone of /č/. Thus the rule changing /č/ to [dž] is an allophonic rule, whereas the biuniqueness condition requires that the rule changing /t/ to /d/ etc. be a morphophonemic rule.

Halle, like Chomsky, argued that the biuniqueness condition was not merely unnecessary but actually a hindrance to adequate phonological analysis, in that it forces the linguist to posit two different rules which produce the same changes in the same environment. Such arguments led generative phonologists to abandon not only the principle of biuniqueness but also the concept of phonemic representation. Schane (1971) pointed out that this was an undesirable development, arguing that phonemic **distinctions** could be determined on the basis of surface contrast. But he too denied the viability of a phonemic **level** as a unique stage in the derivation of surface forms.

As Schane and others pointed out, the output of the phonological rules in SPE-vintage generative work (Chomsky's "systematic phonetic level") was often virtually indistinguishable from a classical phonemic representation of the same data. But this was largely accidental rather than an inherent property of the theory. After Chomsky's attacks on complementary distribution as a criterion for phonological analysis, morphophonemic alternations became the primary data to be accounted for. Early generative work largely ignored the kind of phonetic detail typically observed in allophonic processes.

4. LEXICAL REPRESENTATION vs. PHONEMIC REPRESENTATION

The problem of Russian voicing assimilation provides a revealing comparison of the three theories. Descriptivist phonemics required two distinct rules, one allophonic and the other morphophonemic. The SPE framework required a single rule, denying the validity of the distinction between allophonic and morphophonemic rules. Lexical Phonology posits a single rule, but requires it to apply at two different times and in two different ways.

Within the lexical component, voicing assimilation can apply to only those segments for which voicing is contrastive (phonemic), because of the structure-preservation constraint. It applies cyclically and only within words. Post-lexically, however, voicing assimilation applies to all consonants and can apply across clitic or even full word boundaries. Moreover, while lexical voicing assimilation is categorical, Kiparsky cites evidence that the post-lexical application

of the rule produces gradient effects, i.e. partial voicing (or devoicing) with the strongest effect observed in segments closest to the trigger. The study of such post-lexical processes has been one of the factors contributing to a recent resurgence of interest in phonetic detail on the part of theoretical phonologists.

Thus the LP analysis agrees with the classical phonemic analysis in claiming that the alternation between /t/ and /d/ has a different status than the alternation between /č/ and [dž]. Kiparsky (1985, p. 113–114) notes:

> "Since Russian Voicing Assimilation has figured so prominently in the debate on the phonemic level, a final remark on the relationship between our lexical representations and the structuralist phonemic representations may be appropriate. With regard to the classic point of contention itself, our position should satisfy both parties. The output of the lexical phonology contains of course the voiced obstruents /b d g ž.../, but it does not contain the voiced allophones of the phonemes that lack a phonemic voiced counterpart, namely /č/, /c/, /x/, ... But neither do we require two separate Voicing Assimilation rules: we have a **single** rule which applies both lexically and postlexically with different results as dictated by the principles of the theory."

5. ON "GRAMMATICAL PREREQUISITES"

Another difference between the descriptivist phonemic representation and Lexical Representation is the descriptivists' insistence on the strict separation of phonological and grammatical analysis. Specifically, the descriptivists insisted that phonemic analysis could make no reference to grammatical structure. This view, on the face of it, seems to be the antithesis of the position adopted in LP; yet even here there are similarities. Recall that LP requires the post-lexical phonology (corresponding to the allophonic rules which a phonemic analysis would identify) to be blind to word-internal morphological structure.

Pike (1947, 1952) and Jakobson (1948) argued against the doctrine of separatism, and Jakobson cited similar arguments by Sapir from 25 years earlier. However, the goal of operationalizing the definition of linguistic units drove the descriptivists to reject these arguments, for fear that mixing phonological and grammatical information would lead to circular definitions.

Again, it is important to distinguish between the analytical procedures of the linguist and the formal presentation of the results of that analysis. The descriptivists recognized that every linguist deals with grammatical and phonological facts simultaneously, using each to shed light on the other. But they felt that a rigorous description of the linguistic facts could only be non–circular by proceeding from the bottom up, i.e. from smallest to largest units, with description on each level making no reference to units on a higher level (cf. Hockett 1942, Bloch 1950).

Pike's papers came under attack, both directly (as in subsequent papers by Hockett, Bloch, Trager and Wells) and indirectly, as in Joos's comments on the paper by Bloch (1941) discussed above:

> "It was the present article by Bloch that made clear, as it never had been before, that phonemics must be kept unmixed from all that lies on the opposite side of it from phonetics ... It was a great deal to accomplish in so few pages, and few readers realized that it had been done: the ghost of the slain dragon continued to plague the community of linguists under such names as 'grammatical prerequisites to phonemic analysis' and has not been completely exorcized to this day." (Joos 1957, p. 96)

Pike's discussion of the "interweaving of grammatical and phonemic facts" is at times strongly reminiscent of the LP conception of the interleaving of morphology and phonology. But of course Pike did not distinguish between lexical and phrasal processes. He was equally concerned with phrasal phenomena, that is, the role of grammatical boundaries as potential boundaries for intonational contours, as with word–level processes.

Pike raised several other points that foreshadowed later theoretical developments in interesting ways. He argued in favor of using alternations in morpheme shapes as "clues" to allophonic relationships, and against positing quasi–segmental "juncture" phonemes; an issue of some interest in post–SPE generative phonology. Pike argued instead that the boundaries of grammatical constituents should be recognized as potentially conditioning phonological processes, which is quite close to the position adopted by LP.

6. CONCLUSION

Lexical Phonology represents an integrated approach to the analysis of morphological and phonological structure which recaptures a number of the important intuitions of classical phonemics. The output of the lexical component corresponds closely to classical phonemic representation. The main difference between to two (namely the non–biuniqueness of the former) results from the fact that post–lexical rules in LP can neutralize phonemic contrasts, so long as these rules are exceptionless. But the notion of "phonemic contrast" does play a significant role in LP, e.g. in the formulation of the Structure Preservation Principle as prohibiting lexical operations on non–contrastive features. In fact, the word "phoneme" itself is no longer taboo in generative phonology.

REFERENCES

Bloch, Bernard. 1941. Phonemic overlapping. American Speech 16.278–84.

Bloch, Bernard. 1950. Studies in colloquial Japanese IV: Phonemics. Language 26.86–125.

Chomsky, Noam. 1964. Current issues in linguistic theory. Mouton: The Hague.

Halle, Morris. 1959. The Sound Pattern of Russian. Mouton: The Hague.

Hockett, Charles F. 1942. A system of descriptive phonology. Language 18.3–21.

Jakobson, Roman. 1948. The phonemic and grammatical aspects of language in their interrelation. Proceedings of the Sixth International Congress of Linguists, 5–18.

Joos, Martin, ed. 1957. Readings in Linguistics I: The development of descriptive linguistics in America 1925–56. (4th edition, 1966) Chicago: University of Chicago Press.

Kaisse, Ellen M. and Patricia A. Shaw. 1985. On the theory of Lexical Phonology. Phonology Yearbook 2, 1–30.

Kiparsky, Paul. 1982. Lexical phonology and morphology. In I.–S. Yang (ed.), Linguistics in the Morning Calm. Seoul: Hanshin. 3–91.

Kiparsky, Paul. 1985. Some consequences of lexical phonology. Phonology Yearbook 2, 83–138.

Mohanan, K.P. 1986. The Theory of Lexical Phonology. Dordrecht: Reidel.

Mohanan, K. P. and Tara Mohanan. 1984. Lexical Phonology of the consonant system in Malayalam. Linguistic Inquiry 15:575–602.

Pike, Kenneth L. 1947. Grammatical prerequisites to phonemic analysis. Word 3.155–72.

Pike, Kenneth L. 1952. More on grammatical prerequisites. Word 8.106–121.

Sapir, Edward. 1925. Sound patterns in language. Language 1.37–51.

Sapir, Edward. 1933. The psychological reality of phonemes. In Mandelbaum, David G. (ed.), Selected Writings of Edward Sapir in Language, Culture and Personality. Berkeley and Los Angeles: Univ. of California Press.

Schane, Sanford A. 1971. The phoneme revisited. Language 47.503–521.

NOTES

[1] Many of the ideas in this paper are drawn from classroom lectures by Paul Kiparsky and Don Burquest. My thanks to D. Burquest, K.P. Mohanan and K.L. Pike for comments on an earlier draft of this paper.

Using Bookmarks as Cross References in WORD

BRYAN L. HARMELINK

INTRODUCTION

The feature of WORD which allows you to attach "bookmarks" to specified places in a document is one of the most useful additions in the recent update to WORD[1]. Bookmarks make it easy to jump to a marked piece of text from elswhere in the document. But they also provide other possibilities which are even more useful. Three uses of bookmarks and related features of WORD will be discussed here:

- numbering in series

- cross referencing

- importing text from other documents.

The topic of bookmarks is dealt with at some length in the WORD manual (chapter 15). This article highlights some of the ways bookmarks can be used to benefit the writing of linguistic papers and the work of the field linguist. First of all, we will discuss how to place bookmarks in a document.

DESIGNATING BOOKMARKS

One of the immediate payoffs from bookmarks is being able to quickly jump to specific places in a file. This feature allows you to avoid scrolling through screen after screen of a long document only to miss that line you are looking for. With a bookmark you can instantly go to the specific line or word desired. For example, if you are editing in the middle of a lengthy document and realize that you need to replace an item in the whole file up to the point where you are, it is very easy to go to the beginning of the file with **Ctrl–PgUp**, but returning to the exact spot where you were editing may require a lot of scrolling.

Format bookmarK

At the point at which you want to place a bookmark you need to select a section of text with **F6**[2] and either the mouse or the arrow keys. Then, press **Esc F K** and the following line will appear in the command area:

FORMAT BOOKMARK name:

Enter a name for the bookmark, press **<enter>** and the bookmark is placed. The bookmark is now "anchored" to the first character and the last character of the selected text. Refer to the section entitled "Tips for Working with Bookmarks" on page 257 of the WORD 5.0 manual for specific information regarding the anchors.

Jump bookmarK

When you want to return to the position of the bookmark, press **Esc J K** at which time you will see:

JUMP BOOKMARK name:

Supply the name of the bookmark you want to find, press **<enter>**, and the highlight will go immediately to the selected text where your bookmark is placed.

If you are using several bookmarks in the same document, at the point at which you see JUMP BOOKMARK name:, hit the **F1** key to view a list of the bookmark names. Select the correct one with either the mouse or the arrow keys, and the highlight will move to the position of that bookmark.

If you want further details about the way bookmarks work, please refer to the WORD manual. At this point, we go on to the discussion of some of the ways in which bookmarks can be used.

NUMBERING IN SERIES

The possibility of numbering in series does not technically require using any bookmarks, but is considered here because bookmarks can be used to make reference to items which are numbered in series. Numbering things in series with this feature of WORD alleviates the frustration of renumbering a series of examples, charts, figures, or

whatever else you want to number sequentially. If you have a set of 5 examples in a document you could follow the following steps. First of all, decide what **series code name** to use. A "series code name" is what WORD uses to mark the place where it will number a series of items when the document is printed. A possible series code name could be **ex** for a set of examples. The series code name must end with a colon, yielding **ex:**. After the series code is complete, press **F3** (this inserts the parentheses). See the following figure to see the results of these steps and also how it will appear when printed:

Typed:	Pressing F3:	Printed:
ex:	(ex:)	1
ex:	(ex:)	2
ex:	(ex:)	3
ex:	(ex:)	4
ex:	(ex:)	5

Hint: You can type **ex:** once on a blank line, and press **F3**, then press **F10** to select the whole paragraph. **Delete** it to scrap and then insert it for as many examples as you have in the set. Or, if you will regularly use this for numbering items in a series, you may assign the series code a name for insertion from a glossary whenever it is needed.

Using series code names eliminates the need for going back to renumber examples. Changes in the series do not affect the numbering since the numbers are assigned at the time of printing. For example, if you have a set of 10 examples "numbered" with series codes, you can delete the third, fifth, and seventh examples and when the set of examples is printed, it will be numbered sequentially 1 through 7. If you were to add other examples in the middle of the set, the numbering of the set would be adjusted to accommodate these additions.

You will invariably need to make reference to one of the examples in a series. How can this be done when the number it will have is not yet known? The next section on cross referencing deals with this twist.

CROSS REFERENCING

The use of bookmarks to cross reference items in a document is perhaps their most useful function. The use of bookmarks may seem rather cumbersome to begin with, but the benefits become apparent when you become accustomed to using them. In fact, you will soon wonder how it was possible to keep the references to your charts and examples straight without bookmarks. In this section, three kinds of cross references are considered:

- cross referencing examples

- cross referencing pages

- cross referencing charts and figures

Other kinds of cross references can be made to numbered paragraphs, footnotes, etc. Refer to the WORD manual for further details.

Cross referencing examples

Consider the following to illustrate why you need some way to cross reference the as-yet-unnumbered examples. If all you see on the screen are the series codes, there is no way to say "in example 3..." since it may or may not be the third example when you finish writing. During editing, the examples may get moved around.

(ex:)
(ex:)
(ex:) cross reference needed to this example
(ex:)
(ex:)

The examples of sequentially numbered figures or charts in the WORD manual are not representative of how sets of examples in technical papers are numbered internally. The WORD manual deals primarily with cross referencing between an entire chart or figure rather than to the individual lines in a set of examples. The following things need to be taken into consideration when using bookmarks with sets of examples.

If you need to make reference to an item in the set of examples given above, a bookmark must be used to link the cross references. The

manual recommends designating the bookmark on some text immediately preceding the series code name. This works fine for charts and figures. However, if you have a set of examples as shown above and you place a bookmark on the text immediately preceding the number you want to cross reference, the bookmark may not do what you want it to do. The following example should clarify this matter. (Bookmark placement is indicated by underlined portion):

If the bookmark is placed on part of		(ex:)
the third line and the fourth line like		(ex:)
this example and the fourth line is	—	(ex:)_
deleted, the bookmark will remain on	->	(ex:) X–ref
the third line, making an incorrect	—	(ex:)
cross reference*.	->	
If the bookmark is placed only on the		(ex:)
fourth line, and the fourth line is cut		(ex:)
and pasted to the fifth line, the		(ex:)
bookmark moves with the line		(ex:)
maintaining the correct cross	—	(ex:) X–ref
reference.	->	

* This happens because, as stated in the WORD manual, "If you delete the last character of a bookmark but not the first, Word makes the last character of the remaining bookmark text the ending anchor." (1989:257) In the first example above, the remaining bookmark text is the return of the previous line which becomes the location of the bookmark. The line of text that has been moved no longer has a bookmark. In the second example, however, since the entire bookmark text is moved, the bookmark stays with the line you want to cross reference.

A typical cross reference (following the first illustration above) would read something like "Note that in example 3...". If you are using a bookmark named **example** to cross reference this line, you would type the following:

Note that in example (ex:example)...

To set up a cross reference number, follow these steps :

1) Select the series code which numbers the item to be cross referenced by moving the cursor onto it with either the arrow keys or the mouse;

2) Designate a bookmark for the series code with Format bookmarK (type **Esc F K**); give the bookmark a name that will remind you of the example;

3) Move to the place where the cross reference will be made;

4) Type the name of the series code which was selected in step one, followed by a colon. After the series code, add the name of the bookmark which was positioned on the series code in the set of examples.

5) Press **F3** to make the cross reference link; this places the series code and the bookmark name in parentheses and keeps them together as a unit.

Cross referencing pages

Making cross references to pages is eventually very helpful to the reader, but it can be very tedious to the writer. Using bookmarks can reduce the tedium. For instance, if you want to say, "Refer to the section on verbal aspect on page x", but you still do not know what "page x" will be, use a bookmark. The steps for making this kind of cross reference are basically the same as those in the preceding section. Select a key text at the begining of the section to which the reference will be made (e.g. a section heading). Place a bookmark, named **aspect** for instance, on this selected text.

Now when you come to the place where you want to say: "Refer to the section on verbal aspect on page x" you type:

...on page (page:aspect)

This will cause WORD to generate the number of the page on which the bookmark named aspect appears at the time of printing. This eliminates the need to search your documents for these kinds of references after each reformatting and reprinting.

There may also be times when you want to combine a page cross reference and a reference to an item in a series. This can easily be done by following the steps for each, which would yield the following text in your file:

...see example (ex:example) on page (page:aspect)[3]

Cross referencing charts and figures

Cross referencing charts and figures is essentially the same as making cross reference to pages. The main thing to keep in mind is the location of your bookmarks when cutting and pasting is done. Again, refer to page 257 of the WORD manual for the "Tips for Working with Bookmarks".

IMPORTING TEXT FROM ANOTHER DOCUMENT

Document linking is covered briefly in chapter 29 of the WORD manual (pages 543–545); the discussion here will highlight some of the ways in which this feature can be taken advantage of.

One of the main benefits of using the Library Link Document is the ease with which imported text can be updated. If the text has been modified in the source document, it can be updated in the target document through Library Link Document.

One of the applications for this feature of WORD is building a separate file with all of the examples in a document. For instance, if you have written a paper for presentation at some academic meeting, this can be used to simplify the preparation of a handout giving your examples. Such a handout can also be made by cutting and pasting, but this does not provide the updating possibilities of Library Link Document.

Making a handout

Consider the following. You have just finished your grammar paper and now you want to make a handout. Follow these steps:

1) Select an entire section of examples in your grammar paper;

2) Use Format bookmarK to place a bookmark on the entire selection;

3) Go on to the remaining sections of examples and repeat steps 1 and 2 as many times as necessary;

4) Save the grammar paper document and either load or create the document which will be your handout;

5) Choose Library Link Document (type **Esc L L D**);

6) In the **filename** field, enter the name of the grammar paper document, with the proper pathname if necessary;

7) With the highlight at the position at which you want to import the text, in the **bookmark** field, supply the name of the first bookmarked text to be imported from the grammar paper. At this point, you may press **F1** to see a name of the possible bookmarks. When you import text in this manner, WORD places the code "**.d.**" (formatted as hidden characters) at the beginning and end of each section of imported text;

8) Repeat steps 5 – 7 for as many bookmarked sections of text as you need to import.

If you need to add sections of explanation or headings in the handout, this can be done between each imported section of text.

Updating a handout

One of the inherent problems in moving data from one file to another is how to keep up with changes that are made in one file, but not in another. If a section of one data file has been incorporated into numerous other files, the difficulty is greatly multiplied. Using bookmarks to import text can ease some of these difficulties, because the original text and all of the related files can be updated in a relatively easy way.

Consider again the handout example. If you go back and change any of the bookmarked sections of text in your grammar paper, the handout you are preparing will need to reflect these changes as well. You may need to update the entire handout or only a few sections.

Use the following procedure:

1) Make all changes in the grammar paper, check for the proper placement of all bookmarks, and save the document;

2) Load the document that contains your handout;

3) Set the "show hidden text" field of Options to **Yes** in order to see the hidden **.d.** codes;

4) Select either the **.d.** code of the section to update or the entire document with Shift–F10 if you need to update the whole file;

5) Choose Library Link Document;

6) Leave the "filename" and "bookmark" fields blank;

7) Press **Enter** to have WORD start the update procedure. Respond either **Y** to update the imported text or **N** to leave the text as it is. If you have selected the entire document, WORD will go on to each section with a **.d.** code and ask you whether to update or skip the section.

8) Repeat step 7 as needed for individual sections of imported text.

The Library Link Document function of WORD will also work well going the other direction, i.e. if you have a file of examples that you want to incorporate in your grammar paper, you can bookmark them for inclusion in the paper. Or if there is a paragraph of text material that you want to use as an example, it can be bookmarked for importation through Library Link Document.

CONCLUSION

Bookmarks can give you a valuable referencing tool to use in your documents. Whether you use them to quickly jump to and from bookmarked sections of text or whether you use their cross referencing features, you will undoubtedly benefit from their inclusion in this recent update of WORD.

REFERENCE

Microsoft Corporation. 1989. Using Microsoft Word; Version 5.0. Printed in U.S: Microsoft Corporation.

NOTES

[1] Version 5.0

[2] Editor's note: use of the F6 key is not necessary if a mouse is used to select the text. Chapter 4 of the WORD manual explains the selection of text.

[3] See page 265 of the WORD manual for further details. ■

ROUNDTABLE

Computer training for linguists.

Pursuing the line of thought suggested by Geoffry Hunt in the following article, the editors of NOL would like to begin a short ROUNDTABLE series on the subject of "Computer Training for Linguists". We invite short (1 to 3 page) articles to be submitted by instruction staff and students about their experiences with teaching or learning **linguistic applications for computers** in the setting of **linguistic classes or workshops**. Articles may discuss such things as teaching goals, classroom technique, or evaluations of specific computer programs. This is your chance to speak out on what is effective in learning to use computers as a linguistic tool.

Computer Training at SIL Schools

GEOFFRY HUNT

One important matter in introducing the use of computers into SIL training is to decide the overall objectives. For myself, as I have related to British SIL, these have been two-fold:

1. Create the confidence within new users that they can handle computers in a manner that will be beneficial to them.
2. Use computers for some linguistic tasks, so that they can see the benefits available to linguists.

In order to achieve these, the courses need to be presented by people who can sufficiently distance themselves from the usual jargon and the knowledge assumed of a computer technician. In addition, the programs must be easy to use or fairly easy to use at worst. Our aim is to make better linguists, not to make computer experts. Some people may choose to do more complicated things, but that should not be required. I want to emphasise that the person teaching the computer courses should be a linguist. If you also have a computer technician, that is a bonus.

Recently a group of us met at Horsleys Green to decide what computer training should form part of the British SIL courses. Let me state here what our conclusions were:

For the anthropology course: Use FIESTA (preferably the expected new version) for data entry and searching. This can be done with a minimal introduction to the computer, e.g. insert your anthropology disk, switch on the computer and type **ANTHRO**, and then some instructions about FIESTA itself.

For the Field Methods course:

1. Introduction to computers (hardware, operating system, simple editing)
2. Introduction to acoustic phonetics (speech box & CECIL)
3. FINDPHONE phonology program (inputting, searching & listing phonetic data)

This is the main introduction to computer skills.

For the Literacy Materials course: Possibly teach desktop publishing using the PUBLISH IT![1] program for producing camera ready copy. This is being investigated and is not yet definite.

For the Survey course:

1. WORDSURV program for word lists (lexicostatistics & phonostatistics)
2. Spreadsheets for calculating the results of intelligibility and sociolinguistic surveys.

The Survey course deals with a specialised subject that requires a lot of mathematical calculations. It is therefore important to spend more time adequately introducing computer tools and skills.

For the school library: Catalog books using the FIESTA program. (SSM is well ahead of British SIL in this. When I was in Holzhausen in January, the files that had been previously typed in were indexed by FIESTA and these can now be searched. For the student, a page of instructions fixed on the wall near the computer should be all that is needed.)

We would not go heavily into any computer program, but only sufficiently to get some important benefits from it or to teach some important computer skill. We would concentrate on programs that people are likely to need at the beginning of a language project and which are easy to learn. Therefore, we would not teach the SHOEBOX or IT programs which are for interlinear work and constructing lexicons (SHOEBOX), and are more complex to learn.

The use of FIESTA would be only for the simple entry and searching of data; this would be simple to introduce. The CECIL program is fairly easy to introduce and is fun and instructive to work with. The more complex matter is interpreting the results. The computer introduction and the FINDPHONE program are harder to introduce well, but have been designed so that novices can benefit.

It will be noted that we are not teaching a computerised method of building a lexicon, nor computerised methods for grammatical analysis. The concepts taught with the FINDPHONE program introduce the computer concepts necessary for making a lexicon on a computer. Additional teaching or the provision of good manuals (such as the

SHOEBOX manual) will be needed on the field. I think it would be too much to try and teach more during the Field Methods course.[2]

NOTES

[1] PUBLISH IT! is a trade mark of TIMEWORKS, Inc.; Deerfield, IL.

[2] All of the the programs mentioned in this article are available from the International Computer Services department of JAARS; Waxhaw, NC. ■

Using SHOEBOX in a Linguistic Field Methods Course.

GINGER BOYD

I started my second semester SIL classes with virtually no computer background. The most I had ever done with a computer was minimal word processing (typing in documents, no major editing). At the beginning of our course on "Field Methods in Linguistics", we were required to learn and use the SIL phonology programs for doing a phonological analysis on the "field data" which we were collecting. This was my first significant experience with computers. I learned the program reasonably well and it whetted my interest in computers. As a result, when we started working with SHOEBOX[1], I was determined to learn as much as I could. While my motivation was very high, I think that it is possible for the average student to learn SHOEBOX well in one semester, if they are willing to put in the initial time and energy required to learn the program.

In the Field Methods class, I used SHOEBOX to assist in learning and analyzing Indonesian. It was most useful for entering texts and for interlinearization. The interlinearization allows for flexibility in entering additional information, such as grammatical analyses. SHOEBOX is also useful for the creation and maintenance of dictionaries, because all of the interlinearized words are placed in a lexicon.

I found the program very helpful for the class. It gave me a quick and useful way of compiling, sorting and accessing data that was not cumbersome and, once learned, facilitated analysis. Especially helpful was the interrelatedness of the databases. I really like SHOEBOX, and think it will be quite useful in field work, but I think it definitely can use more development, to make it more powerful[2] and work out its chinks.

SHOEBOX is new and is still awkward. It seems to lack some safeguards and thus it is easy for the naive user to make it hang up. It also lacks some of the little things that would make it run more smoothly[3]. The more computer-literate users are less likely to run into serious problems.

Many of the students, not being very familiar with computers, ran into trouble at times. For instance, some students lost large amounts of data, not knowing some of the precautions required to safeguard it. Running into troubles like this, it is easy for the student to become frustrated. As newer versions come out, hopefully these problems will be solved.

NOTES

[1] SHOEBOX is available from the International Computer Services department of JAARS; Waxhaw, NC. and from the SIL Bookstore; Dallas, TX.

[2] While I admittedly do not know the full capabilities of SHOEBOX, the following are some things I wanted to do but could not find a way to do with the program:

1. Ability to print directly from the program, rather than being limited to outputting to files only.

2. Would like the capability to do general searches of the body of the data, for example, finding all occurances of a given word.

3. Would like to be able to output the body of a data field without including the template.

[3] For instance, when editing, it would be nice if the cursor started out at the end of a record where new material is generally added, instead of having to position it there manually. ■

REVIEWS OF BOOKS

East meets West: Homage to Edgar C. Knowlton, Jr. Edited by Roger L. Hadlich and J.D. Ellsworth. Honolulu: Department of European Languages and Literature, College of Languages, Linguistics, and Literatures. 988. Hardback. Pp. 336.

Reviewed by ALAN S. KAYE

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The name of Edgar C. Knowlton, Jr. is not likely to be known by too many linguists outside of Spanish and Portuguese linguistics or Pacific Rim Studies, however, some general linguists might recall seeing a few of his articles in *American Speech* (such as the 1973 *Chinese, Japanese, and Korean Loan words in Webster's Third*, 15:8–29). This is his *Festschrift* with 30 articles on various linguistic and literary themes by friends and colleagues. Knowlton's bibliography is published at the end of the volume (pp. 325–336), and his colleague of many years, Dorothy B. Aspinwall of the University of Hawaii, has written a witty bibliographical note (pp. xi–xii) on the honoree and his accomplishments (born 1921; A.B. Harvard 1941, M.A. Harvard 1942, Ph.D. Stanford 1959: dissertation – *Words of Chinese, Japanese and Korean Origin in the Romance Languages*), in which we learn that he is fluent in 11 languages and knows 15 others moderately well. As she states in the Pidgin English of Hawaii (p. xii), "lucky he came Hawaii", where he has taught for many years. Indeed one must note, incidentally, how rare it is for a linguist to be so multilingual.

Space prohibits even a brief commentary on each of the 30 contributions to the volume. More importantly, I believe it is beyond the purview of any one linguist to be able to meaningfully review some detailed literary study, on the one hand, such as Alan S. Trueblood's *Some Aspects of the Art of Dialogue in Viaje de Turquía*, and William F. Scherer's *Nietzsche and his Zarathustra: Vatic Poet-Tragic Vision*, on the other. Even the mainstream linguistic articles are beyond the purview of a single linguist, or at least this linguist. For instance, I was impressed by the 38 notes and the scholarship displayed in Philip N. Jenner's 22 page article, *In Search of Old Khmer*

ni, but being an Arabist and Semitist by training and despite other wide-ranging interests, the paper is, unfortunately, Greek to me.

Therefore, I plan to discuss only those articles which might be of interest to the typical reader of this journal. It is not my intention to hurt anyone's feelings by singling out only some of these papers, all of which appear to be excellent offerings. As the editors say in the Preface (p. vii): "Like Professor Knowlton's own interests, the articles contributed to this *Festschrift* are wide-ranging and embrace a variety of academic disciplines."

Byron W. Bender's *Predicting Morphological Change* (pp. 17-31) is an insightful defense of "Item and Arrangement" linguistics over the "Item and Process" approaches to paradigmatic leveling, using data from Latin and Spanish[1]. The author's work corroborates the ideas of R. Jeffers and I. Lehiste in their 1979 textbook (quoted on p. 17) that "as a consequence of levelling, linguistic reconstruction through the method of internal reconstruction is often hindered or made impossible."

Michael L. Forman's *Several Prodigal Sons: A Closer Look at the Preposition na in Zamboangueño and Asian Creoles Portuguese* (pp.63-71) is a penetrating cross-dialectal study of the general locative particle *na* "at, by, from, in, on, to". It supports the theory that Zamboangueño (=Philippine Creole Spanish, also known as Ternateño, Caviteño, and Chabacano) has an original Portuguese base supporting Keith Whinnom's idea that *na* came from a Portuguese *lingua franca*, however, this feature links Zamboangueño the creole of Diu and Papiamentu, therefore indicating (p. 69) "that there is not one uniform Portuguese creole base, not even one uniform Indo-Portuguese creole base, involving *na*." To my way of thinking, the conclusion offered by Forman casts some doubt as to the designation of a proto-creole in general (and, *ipso facto*, a proto-pidgin).

George W. Grace's *Do Languages Change at a Constant Rate* (pp. 72-79) is a critique of classical (Swadeshian) glottochronology and lexicostatistics arguing against its basic assumption that linguistic change proceeds at a constant rate. One notes that outside of a 1985 paper by Grace, all the bibliography cited is from the 1950's and 1960's. It seems strange to see the topic being brought up again in the 1980's, although it must be admitted that Grace is not the only linguist trying to resurrect some issues in this still important area.

Hsin-I Hsieh's *A Mathematical Interpretation of the Whorfian Hypothesis* (pp. 117–134) is as thought provoking as the Sapir–Whorf hypothesis itself. Hsieh offers some convincing arguments why one should be both a universalist and a relativist. The fact that translation can occur at all and the fact that another language can be learned is evidence in favor of universalism, however, the author compares the Chinese sentence (p. 122) *tā zǒu cuò le fángjiān*, lit., "he walk mistakenly perfective_marker room" with its English translation "He entered the wrong room" stating the two sentences are fundamentally different and, therefore, not really accurate translations of one another because the Chinese sentence explicitly states that an error was made, but that is not the case in English in which this very meaning is implied. Moreover, the author points out (ibid.) the very interesting fact that in Japanese both meanings are possible in two different surface structures as in (the Chinese type) *sono hito wa chigau heya ni haitta* and (the English type) *sono hito wa heya o machigaete haiyya*.

Although not all linguists will agree that even a mild version of the Whorfian Hypothesis is valid, some linguists such as myself can agree with the author (p. 124) when he writes: "...since divergent languages reveal divergent systems of thought, a study of language along the line of Whorf is a meaningful pursuit if for no other purpose than the comparison of different human conceptual schemes."

The last paper I intend to comment on here is Norman P. Sacks'"Salvador de Madariaga's Interest in Language" (pp. 246–266). De Madariaga was a Spaniard (1886–1978; born in La Coruña in Galicia, north of Portugal on the west coast) who spoke and wrote fluent English and French as well as his native Spanish.

Sacks labels de Madariaga as a Prescriptivist but is one himself. For instance, commenting on the English loanword in Spanish *libin* "living room", we note de Madariaga's statement (ibid.) that English "living room" is very **inexact** (emphasis mine) because it is not a room in which one lives. This prescriptivism (read "bias") is reiterated in his (1931) book *Englishmen, Frenchmen, Spaniards* (London: Oxford University Press) since (as Sacks tells us, p. 249) the Englishman is called the man of action, the Frenchman the man of thought, and the Spaniard the man of passion. One must, of course, bear in mind that the year is 1931.

There is a lot of talk in the article reflecting the "death" of Spanish or the fact that Spanish is being "killed" (this reminds one of Edwin Newman's pronouncements about how English has also gone to the dogs), e.g., "Madariaga was troubled also by the influence of English upon Spanish... " (p. 254), or (ibid.) "Madariaga finds most irritating the frequent use and abuse of the passive construction... ". Regrettably, one even sees more or less the same prescriptivism on Sacks' part. Consider (p. 264): "...people who know more than one language use their language consciously." I know of no empirical evidence which proves that a bilingual uses both languages **consciously** whereas a monolingual does not.

Sacks also wants to know (p. 253) why Spanish must borrow *lider* (from English *leader*) since it already has *jefe* or *caudillo*? He writes (ibid.): "One may well ask if any of the above Anglicisms serve any real purpose in Spanish." Hasn't he heard of synonymy and sociolectology? Why does English have *optometrist* when *eye doctor* will do? Consider also *biology* and *life science(s)* in English. It seems a basic universal that languages have different means for saying pretty much the same thing on the lexical (as well as the syntactic) level.

I find de Madariaga's conception of phonetic evolution rather naive (p. 247), specifically, that phonetic laws are "simplifications":

> "...Madariga finds the French words are a simplification of the Latin and that the process of reducing the Latin words to their essential elements is similar to that of abstraction, not surprising in view of the tendency towards abstraction of the French mind."

Language change cannot be viewed as a simplification any more than social or political change can be. The term "simplification" when applied to language is loaded with pitfalls and should be abandoned. Personally, I even think it is erroneous to view creole languages as simplified systems (see my *Observations on Pidginistics and Creolistics* forthcoming in *Semiotica*). 'Tis rather like saying that Spanish is simpler than Arabic.

I see this book as a mixed bag of nuts[2]. There is something for everybody (providing you like nuts) interested in languages, linguistics, and/or literature(s) – obviously a fitting tribute to the many talents of Edgar C. Knowlton, Jr.

NOTES

[1] This recalls Charles F. Hockett's *Two Models of Grammatical Description*, in *Word* [1954] 10:210–231

[2] I am familiar with this type of *Festschrift* since I myself edited one for a retired colleague at my University (d. 1988), viz., *Studies in the humanities: A Festschrift in honor of Joseph Kalir*. 1985. Fullerton, California: California State University, Fullerton. 171 pp. The topics in this volume were more widely varied than the book presently undergoing review. ■

Patterns, thinking, and cognition, A theory of judgment. By Harold Margolis. 1987. Chicago: The University of Chicago Press. Pp. xii, 332. Paper $15.95.

Reviewed by CHARLES PECK

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Margolis' work is of interest to linguists because he takes the Gestalt[1] patterns that Lakoff and Johnson[2] have applied to language and constructs a fairly complete theory of intellectual activity. The fact that Margolis can construct such a full theory on the basis of Gestalt patterns gives more weight to Lakoff's and Johnson's theories of language. Furthermore his work gives more weight to Tagmemic theory if we conceive of Tagmemic analysis as a way to describe the syntactic patterns of a language.

Margolis divides thinking into two varieties: "**seeing–that**" (intuitive recognition) and "**reasoning–why**" (hindsight, reasoned explanation and evaluation). The **seeing–that** phase is very brief, often less than a tenth of a second, and is completely unconscious. It is so unconscious that no one can introspect its operation. Being neither logical nor illogical, but alogical, it is based entirely upon pattern–matching. A person's mental habits and state (=**scenario**) influence the **seeing–that.** In spite of its being alogical and influenced by mental habits, our **seeing–that** is usually correct and we are able to function satisfactorily in the world.

Seeing–that may involve several cycles of pattern matching. You see a person approaching. The first cycle probably involves noting the

sex and size of the person. Then you look at the person's eyes, you look at the rest of the person's face, you keep matching patterns until you know (**jump** to the conclusion) that you know, or do not know, who the person is. This series of pattern–matching goes on almost every second we are awake. Margolis calls the process *P*–cognition (Pattern Cognition).

The patterns may be either static patterns of stable contexts or they may be dynamic patterns of repeated activities. Static patterns are the patterns of arrangement and color associated with one's home, the rooms in the home, one's work place, and so on. If someone paints the object or rearranges the furniture, you notice it right away. Dynamic patterns are those associated with a sequence of actions, such as speech, gestures, and habitual actions. For instance, if you are driving down the street (a dynamic pattern) and you see a red stop light (a static pattern) you do a certain sequence of actions to bring your car to a stop (a dynamic pattern).

If the initial **seeing–that** runs into trouble, a person does a **double–take** and starts over looking for more clues and different pattern matching. If this **double–take** occurs often enough, the original cues and patterns may be revised or new cues and patterns added to the repertoire[3].

The **reasoning–why** phase is what is commonly called "rationalizing". It is what a person does when he or she figures out a reason or an explanation for his or her insight. An extended **reasoning–why**, for example, as when you are trying to figure out why some unexplained event happened, may involve episodes of **seeing–that,** as you recognize new ways to explain what happened.

We cannot explain our **seeing–that** to another person, but we can explain our **reasoning–why** to another person.

Usually our **reasoning–why** is brief, just enough for us to understand, to our own satisfaction, the world around us and what happens to us in the course of life. But if we are a scientist or mathematician who is coming up with a significant new theorem or idea, our **reasoning–why** may be long and involved and necessitate writing down the steps and "chunking" them so that we do not have to hold everything in our mind. Such **reasoning–why** requires **seeing–that** insights to help us make the explanation persuasive to other people.

Margolis, in his second chapter, presents some optical and mental illusions to show that our **seeing–that** and **reasoning–why** can sometimes be wrong. He returns to some of them in chapter eight and shows that some of the illusions are the results of miscued scenarios and miscued reasoning.

In his third chapter, Margolis relates pattern cognition to Darwinian evolution and says that creatures with higher levels of intelligence must have quick pattern recognition that must be balanced against taking time to figure things out, for the survival of the organism. This is true even of modern urban humans: driving in city traffic requires a lot of snap judgements and quick actions; studying the situations is left for periods of reflection. Other activities, such as writing book reviews, allow more time for figuring out what to do next.

Chapter four discusses *P*–Cognition in more detail. First, we have only one focus of attention and all others are shut out. Everyone functions in various different roles: at home, at school, at work, at play, parenting, and so on. When we are functioning in a role, we are unaware of the other roles. When we have one scenario in mind, we are unaware of other possible scenarios.

Patterns have a dual function. They are used both in cognition and in directing our activity.

Chapter five deals with how we use our **seeing–that** and **reasoning–why** to form judgments with various degrees of confidence.

We can always learn new patterns if they are closely related to patterns we already have. We often have to learn new cues and new patterns. In chapters six and seven, Margolis discusses many of the finer details of forming judgments, evaluating new ideas, forming new ideas and building on new ideas. He also discusses the difficulty of breaking out of deeply entrenched ideas or systems of patterns, and how new ideas are rejected by the older generation and accepted by the younger generation.

Chapter eight revisits some of the intellectual illusions of chapter two. Chapters nine through fourteen deal with Kuhnian paradigm shifts (Kuhn 1962 and 1970), ending with the Copernican paradigm shift: how Copernicus may have been jarred out of the old way of thinking,

how he presented his ideas, how they were accepted by some, rejected by others, and how they eventually won universal acceptance.

Margolis has developed an account of how the human mind operates, which also concerns many philosophers. But we still wait for a philosopher to relate this theory to the traditional questions of philosophy, such as epistemology, metaphysics, truth, beauty, and so on.

Margolis' style of writing is difficult to follow in the theoretical chapters. He writes without topic sentences in his paragraphs, so I often had to reread paragraphs and try to figure out what they were trying to say. Furthermore, he often has rather awkward sentences, for example (p.162):

> "Given a verbal description, where the situation is not one so familiar that we can recognize it at a glance (see it as a single unit), the content of the description may be too far back (fig. 1, Introduction)—its spiral may be out of the sweep of the current spiral—to be effective in prompting the scenario that is appropriate when we finally reach the question to be answered."

REFERENCES

Johnson, Mark. 1987. The body in the mind: The bodily basis of meaning, imagination, and reason. Chicago: The University of Chicago Press.

Kuhn, Thomas S. 1962 and 1970. The structure of scientific revolutions. Chicago: The University of Chicago Press.

Lakoff, George. 1987. Women, fire, and dangerous things: What categories reveal about the mind. Chicago: The University of Chicago Press.

NOTES

[1] Gestalt psychology was proposed in Europe early in this century as a protest against the structuralism that said that perceptions were in terms of individual flavors, feelings, tastes and sights. Gestalt psychology said that perceptions are in terms of whole patterns. One of their slogans was, "The whole is more than the sum of its parts." (That is, a sentence is more than an alphabetized list of the words in it; it is the sequence of the words according to some accepted pattern that makes a sentence.)

[2] Lakoff calls the Gestalt patterns "idealized cognitive models". Johnson calls the Gestalt patterns in language "image schemata". Margolis calls them just "patterns".

[3] The number of patterns in each person's repertoire is on the order of one million. English, a modern language, involves at least half a million patterns (almost one hundred thousand lexemes with an average of five phonemes in each word, in both sound patterns and written patterns, plus all the grammatical and semantic patterns that go with the words. See "How many words are there in printed school English?" by William E. Nagy and Richard C. Anderson, in: Reading Research Quarterly, Spring, 1984, XIX/3, Pp. 304–330.) Other languages of modern industrial nations have similar pattern requirements. Languages of preliterate, oral societies are about one tenth as large.

Margolis quotes (p.124) Newell and Simon as saying that expert knowledge, such as playing high-level chess or speaking a language fluently, implies something on the order of 50,000 stored patterns. I think this estimate is far too low. ■

The body in the mind: the bodily basis of meaning, imagination and reason. Mark Johnson. Chicago: University of Chicago press, 1987. 233 pp. $27.50.

Reviewed by THOMAS E. PAYNE

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INTRODUCTION

Last year I wrote an article for NOL entitled *Roots and Concerns of Typological/functional Linguistics* (Payne 1988). In that article I asserted that a central concern of "typological/functional" linguistics was to expand the notion of **functional explanation** for linguistic phenomena. In the same issue of NOL appeared Lou Hohulin's review of George Lakoff's *Women, fire and dangerous things: what categories reveal about the mind.* Later that year I had the opportunity to read Lakoff's book, and now Johnson's and I am convinced that these works satisfy a long-felt need for an explicit framework within which to propose, test and evaluate what have been called functional explanations.

Johnson is writing to an audience of philosophers about a view of human cognition that has arisen in recent years from several sources,

including linguistics, anthropology and cognitive psychology. This view, with slight variations, has also been articulated recently by Lakoff and Johnson (1984), Lakoff (1987), Langacker (1987) and Margolis (1987). The tradition that Johnson's work represents essentially challenges much previous wisdom concerning the nature of mind, scientific explanation and truth. It replaces the concept of OBJECTIVITY with EXPERIENTIAL REALISM, i.e. the notion that the categories of natural human reasoning are built from holistic cognitive patterns (or "images") derived experientially, rather than from any mind–independent categories in some objective world (e.g. the "real world").

In this review I intend to 1) describe Johnson's view of cognition and 2) illustrate how his notion of "image–schematic structures" can be of value to field linguists. This second section will take the form of a discussion of the functions of four dependent verb suffixes in Panare, a Carib language.

THE MYTH OF OBJECTIVITY

Johnson challenges the notion that in order for a proposition to be TRUE, it must be provable according to the rules and methodologies of "objectivist" philosophy. According to Johnson, objectivity in the investigation of cognition and language is a myth that has outlived its usefulness. This is because the human mind does not function according to objective categories. Rather, human cognitive categories are metaphorical extensions of fundamental human biological experiences. In other words, the categories that are important to human cognition do not necessarily correspond to objective (disembodied, mind–independent) categories "out there in the real world", though they may be. Rather they flow out of how human beings characteristically experience and shape their world. The human body naturally has a great effect on how categorization is structured, as it determines to a large extent what kinds of stimuli and relationships are significant to people. Johnson specifically claims to be reinstating the importance of the physical body to our understanding of human conceptualization.

For example, Johnson shows that the human body constrains what kinds of entities tend to be classified as "basic level" lexical items. The notion of basic level categories is based on much research in

cognitive psychology (Rosch 1978 *inter alia*). In essence this research shows that there is a certain level of categorization that contains categories that are most easily recognized, and most generally accepted among members of a community. Finer and grosser levels of categorization exist, but these are clearly cognitively less salient than the basic level. It is not surprising, according to Johnson, that basic level categories tend to consist of items that humans interact with on an everyday, experiential basis. For example, given pictures of various pieces of furniture, subjects will respond with names such as "*chair*", "*couch*", "*table*", etc. rather than subordinate terms such as "*captain's chair*", "*easy chair*" or "*parson's table*", or superordinate terms such as "*furniture*". This tendency, according to Johnson, is because humans characteristically interact with furniture as chairs and tables, e.g. the motor activities involved in using any chair are roughly equivalent, and these are distinct from motor activities involved in using a table. Human beings do not normally interact with FURNITURE as a category (though they may, e.g. "*we sold all of our furniture*", "*they used the furniture for firewood*". These are not, however, **characteristic** means of interacting with furniture.)

Even such astronomical items as STARS are recognized according to the level at which people characteristically interact with them and distinguish them from other categories. Objectively the sun is just another star, but human beings tend to categorize the sun as DIFFERENT from other stars simply because the sun has a massive effect on human activities that other stars do not. Conversely, planets that for common intents and purposes have the same effect on human activities as stars do (e.g. they decorate the night sky and alert us to various nocturnal atmospheric conditions) are recognized as belonging to the same category as STARS, even though objectively planets are very different from stars.

The point of Johnson's discussion is not simply to recapitulate the common observation that human categorization does not necessarily divide up the world along natural, objective categorical boundaries. Rather it is to illustrate the profound problem in even conceiving of OBJECTIVE categorization apart from human interaction with the items being categorized. What exactly makes a planet different from a star if not the effect each has on human activity? There is great heterogeneity within the category of stars, and for certain purposes it may be important for people to distinguish various subcategories. The

key phrase here is **for certain purposes**, i.e. stars and planets simply **are** the same for most human purposes. For some others they must be distinguished. For still other purposes, finer divisions within each category can be made.

Some may infer that since Johnson argues against objectivist philosophy, then he must be a "relativist", a term that has fallen into disrepute since Whorf's intriguing but poorly conceived arguments that the structure of one's language influences the structure of one's thinking. It is very clear, however, that Johnson is not a "naive relativist" in the tradition of Whorf and a few others. Rather he calls himself an "experiential realist" (as opposed to an objectivist). Whereas the naive relativist would say that there are no objective categories, the experiential realist asserts simply that human cognition is not structured in terms of objective categories. Instead it is structured in terms of experientially based categories (as described above). Given the mounting evidence from cognitive psychology, anthropology, linguistics and other disciplines, this is a conclusion that I find inescapable. Experiential realists do not deny the existence of objective categories. Rather they assert that the categories used in human cognition are image–schematic projections. Even when a cognitive category happens to match some objective reality, still the cognitive category itself is an image–schematic projection derived from experience with the objective category. Often, however, image–schematic projections create concepts that have no mind–independent reality.

THE CENTRALITY OF IMAGINATION

In addition to the importance of the human body and bodily experience in determining human cognitive structure, another central theme of Johnson's approach is that imagination is essential to human rationality. It is far more than a peripheral faculty, useful for such relatively rare tasks as invention and discovery but inessential to our everyday thinking about and understanding of our world. For Johnson, imagination is the capacity to make connections between objectively disparate items (e.g. to say THIS is an instance of THAT) based on experience, native perceptual and cognitive capacities and situational context.

For example, the treatment of stars and planets as belonging to a unified category requires imagination. The category is not based on some list of criterional properties or components of meaning that people mechanistically apply to phenomena in the process of choosing lexical items. Rather the category adheres because of a pre-objective, imaginative if you will, projection of SAMENESS on an objectively diverse set of phenomena. This sense of sameness has as much to do with how people experience the phenomena as with any objective properties that the phenomena share.

The role of imagination in cognition is perhaps more evident in more complex conceptualizations than simple lexical categorization. Here we begin to ascertain the real power of Johnson's philosophy for field linguists. This is the notion that grammatical constructions are related by metaphorical (imaginative, analogical etc.) extension to **cognitive models**. The notion of cognitive model is analogous to the "frames" of Minsky (1977) and Fillmore (1982). A cognitive model is a unified cognitive pattern of relationships that serves as the basis for conceptualizing various phenomena. For example, the cognitive model of WAR serves within my culture as the basis for understanding and reasoning about such diverse phenomena as argumentation and sexuality. This conclusion is derived partially from observation of such common locutions as the following (examples adapted from Johnson 1987):

ARGUMENT IS WAR:
Your claims are indefensible.
He demolished my argument.
I attacked every weak point in his argument.
She came at him with both barrels.

SEXUALITY IS WAR
He is known for his many conquests.
She devastated me.
I couldn't resist his advances.
She fought for him, but his mistress won out.

Johnson argues that our whole concept of argumentation does not exist apart from our extension of the WAR model to the realm of intellectual activity. One could imagine a community in which a functional equivalent (in a loose sense) of argumentation were based on the model of dance or some other cooperative rather than competitive activity. Argumentation is not simply an objective

phenomenon that lends itself to the same sort of terminology as war does. Rather, it is conceptualized by imaginative extension from another humanly created concept. To say that a concept is humanly created (i.e. results from human interaction with the world) is not to say that it is unreal. Argumentation is a very real concept. It just isn't **objective**, i.e. mind–independent, disembodied, "in the world".

IMAGE–SCHEMATIC STRUCTURES AND MEDIAL CLAUSES IN PANARE

In the following paragraphs I will briefly illustrate how the notion of cognitive models can aid a field linguist in coming to grips with otherwise perplexing syntactic and semantic data. The cognitive model to be explicated here I will term the "JOURNEY" model. This fundamentally spatial model serves as the basis in many languages for conceptualizing the temporal relations of ANTERIOR and POSTERIOR and the logical relations of CAUSE/REASON and PURPOSE/RESULT as well[1]. I will show how this cognitive model explains the use of certain medial clause suffixes in Panare to convey a variety of interpropositional relations. The Panare data are not conclusive with respect to whether the temporal relations or the spatial relations are fundamental. Nevertheless, the data are consistent with the model insofar as temporal anteriority corresponds to logical cause or reason, whereas temporal posteriority corresponds to logical result or purpose. The model would be invalidated if any of these correspondences were the other way around.

The dependent verbal suffixes *–séjpe*, *–sé'ñape* and *–ñépe* all signify that the action expressed by the attached verb closely follows in temporal sequence the action expressed in the previous clause. Clauses headed by verbs marked with these suffixes have the approximate discourse–pragmatic sense of independent clauses introduced by *then*, *and then*, *and so*, etc. in English. The suffixes *–séjpe* and *–sé'ñape* convey a high degree of discourse continuity (Givón 1983, Scancarelli 1989) between the two clauses. This continuity typically coincides with referential identity between one argument of each of the clauses – *–séjpe* signals actor/source/inception–oriented continuity, whereas *–sé'ñape* signals patient/result/termination–oriented continuity. *–ñépe*, on the other hand, conveys a lower degree of continuity. This low continuity usually translates into referential non–identity between the agent of

the *–ñépe* clause and that of the previous clause. In another paper I argue that all three of these suffixes mark medial clauses as defined, e.g., by Longacre (1985).

Example 1 illustrates a *–séjpe* construction and example 2 illustrates a sé'ñape construction[2]:

(1) a. *Y–apoñe–n* *këj* *i'yaka–e* *y–upu'ma–sa,*
3–arrive–NONSPEC:I AN:PROX 3:family–POSS 3–fall–PPART

b. *y–o'koma–***séjpe.**
3–raise–HC:SEQ1

'Some counterparts of the fallen one arrive, and then/in order to raise him.'[3] (PST.08.11.1)

(2) *Y–owopataka–n* *wëiki ij–chawo* *y–uwë'–***sé'ñape**
3–come:out–NONSPEC:I deer bush–LOC 3–kill–HC:SEQ2

y–úya
1SG–DAT

'The deer came out of the woods and then was killed by me.' (JP)

Example 3 illustrates the dependent clause suffix *–ñépe*:

(3) *y–apo'ma–ñe* *e'ñapa i'yakae* *këñ* *akëmo*
3–command–NONSPEC:T person comrade AN:INVIS wasp

*y–ápɨ–***ñépe**
TRNS–test–LC:SEQ

'The people sent a companion / to test the wasps.'
/ and he tested the wasps.'

The suffix *–pómën* indicates continuing actor reference and ANTERIOR temporal sequencing. That is, it signals that the action described by the verb it is attached to occurs prior to the action described by a preceding independent clause. This suffix also exhibits all of the characteristics of medial clauses listed by Longacre (1985:264):

(4) *y–achima–séjpe,* *y–ɨ'nanpa–***pómën**
3–dance–CR:SEQ 3–adorn–CR:ANTER

'Then they dance, after/because she adorns him.'

(5) *yu–të–séjpe–nkë* *mën* *y–ámu'–***pómën** *tikon*
3–go–HC:SEQ1–also INAN TRNS–steal–CR:ANTER child

'and then he goes also, after/because he had stolen it.'

Of interest to our discussion is the fact that these dependent clause suffixes convey various interpropositional relations in addition to temporal relationships and SAME–REFERENCE or SWITCH–REFERENCE functions. In particular, a PURPOSE relationship often holds between a *–séjpe* clause and the preceding clause, even though there exists a perfectly adequate adverbial clause purpose suffix *–tópe*. The difference between using *–séjpe* rather than *–tópe* in example 1 is that *–séjpe* asserts that the situation described in the dependent clause actually occurred, whereas *–tópe* does not. Nevertheless, bilingual native speakers will frequently translate a *–séjpe* clause with a Spanish purpose adverbial clause introduced by *para*.

Example 2 illustrates that *–sé'ñape* clauses, in addition to conveying the temporal relation of SUCCESSION, also conveys the logical relation of RESULT, e.g., *the deer was shot as a result of having come out of the woods*. The suffix *–séjpe* would be unacceptable in this circumstance because the actors are different in the two clauses. According to the temporal and switch–reference functions alone, *–ñépe* would be appropriate in example 2. However, *–ñépe* would tend to convey that the deer came out of the woods and then the speaker shot something else or the deer came out of the woods in order to be shot. –sé'ñape on the other hand, clearly expresses a RESULT relation and excludes the PURPOSE relation.

The following extended example further illustrates how *–sé'ñape* indicates a resultative sense. The conversational exchange leading up to the *sé'ñape* clause in this excerpt is given in English translation:

(6) A: What (kind of) fruit?
B: I dunno.
A: mmmmm
B: Big.
A: Big, mmmmm.
B: Larger fruit than around here. He put it on his bike ...
A: yes.
B: *Y–an–***se'ñape**.
3–take–HC.SEQ2
'And it was taken.' (PST.12.16)

According to the function of *–séjpe* as indicating continuing primary actor, *–séjpe* should be sanctioned in this environment as well, since the boy who puts the fruit on the bike is the same one who takes the fruit. However, the high number of mentions of fruit in the preceding

context makes it clear that the fruit, and what happens to it, is the primary object of discussion rather than the boy and what he does.

It is worth noting at this point that *–sé'ñape* is clearly related to the PATIENT nominalizer *–sé'ña*. A few examples of this nominalizer are provided here:

(7) *Ejke* *y–amenkë–***sé'ña** *kure atawën.*
NEG:EXIST 3–write–PART2 much all
'There isn't anything to be written down.' (MCW.31.18)

(8) *Mo–ka* *n–aj* *y–apanawa–***sé'ña**?
EXIST–QP 3–AUX 3–rub:on–PART2
'Do you have something to rub on it?' (JP)

(9) *Y–ërëëka–***sé'ña** *mën* *aro.*
3–winnow–PART2 INAN:INVIS rice
'The rice is to be winnowed.' (JP)

The meaning of *–sé'ña* as a nominalizer can be summarized as "one destined to be VERBed"[4].

Example 3 illustrates that *–ñépe* clauses can be understood as conveying a PURPOSE relationship. Additionally, clauses with *–ñépe* strongly tend to be construed as describing events that are spatially displaced from the situation described in the previous clause. For example, in 3, the verb *apó'ma* without a *–ñépe* complement simply means "command". With a *–ñépe* complement, however, the gloss "send" is more appropriate, as this English verb combines the notions of COMMAND and SPATIAL DISPLACEMENT.

As suggested by the glosses of examples 4 and 5, *–pómën* clauses often convey a reason (BECAUSE) relation as well as temporal anteriority.

Table 1 summarizes the data presented on these four medial clause suffixes. In the rest of this section I will attempt to show how these properties make sense in terms of a cognitive model in which temporal and logical relations are unified metaphorical extensions of a fundamentally spatial model.

Table 1: Medial clause operators in Panare

Operator	Temporal relation:	Reference relation:	Other relations:
-séjpe	SUCCESSION	SAME Actor	PURPOSE
-sé'ñape	SUCCESSION	SAME Patient	RESULT
-ñépe	SUCCESSION	DIFF. Actor	DISPLACEMENT/PURPOSE
-pómën	ANTERIORITY	SAME Actor	REASON

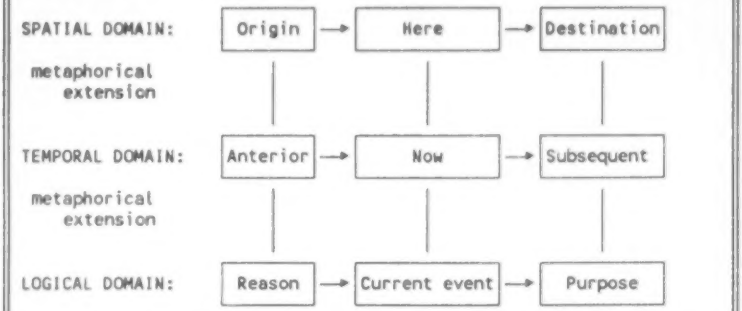
In Johnson's view cognition is structured in terms of "cognitive models", i.e. holistic schematic images composed of various elements, including participants, props, events, states, etc. and the relationships between them. Johnson describes cognitive models as "image-schematic structures". They are images in that they are "imaged" (imagined or projected) representations extrapolated from recurring bodily experiences. They are schematic in that the precise details of the participants, relationships etc. are not specified. They are structures in that they involve arrays of relationships among items.

Cognitive models derive from common human interactions with the world. For example, people commonly experience situations known as journeys. Such situations can be described schematically as consisting of a trajector (i.e. the person that moves), a source, a current location and a goal. This model is undoubtedly well-installed in the cognitive structure of all communities, since travelling from place to place is such a pervasive human activity. If our bodies were constructed more like those of trees we probably would not have the image-schematic representation of a journey burned into our cognitive structure.

Once a cognitive model is established, it can serve as the analogical basis for conceptualizing various other phenomena. The JOURNEY model is particularly well suited to serve as the conceptual model for various experiences involving progression from one situation to another, including temporal succession and logical relationships such as causation and purpose. Any given event is situated in a context that includes prior and subsequent events or situations. This is analogous to any given location of a journey being related to previous and subsequent locations. Typically, prior situations can be construed as causes, or reasons for subsequent situations. Anticipated situations can similarly be construed as purposes towards which current events

are directed. These metaphorical correspondences are illustrated in table 2.

Table 2: Metaphorical connections between spatial, temporal and logical relations as expressed by medial clauses in Panare.



The reason for doing something is logically prior to the act of doing it, hence it is understandable that morphology associated with temporal anteriority should metaphorically be extended to encode reason. Similarly, the purpose for doing something is logically subsequent to actually doing it – we do X in order to bring about a subsequent situation Y, where Y is the purpose for X. Therefore, it is understandable that morphology associated with temporal posteriority should be metaphorically extended to encode purpose. Counter examples to this hypothesis are well defined: languages in which markers of temporal anteriority are extended to encode purpose (rather than reason) and/or where markers of subsequent action are extended to encode reason.

We would hypothesize that the order of development of these functions would be first the temporal functions and then the logical functions. Our basis for this hypothesis stems from universal principles and from evidence within Panare. Universally languages tend to have more spatial and temporal connectors than logical connectors. For those languages that have documented histories, the development of tense/aspect and clause combining morphology nearly universally follows the path of space —> time —> logic (Anderson 1973, Diehl 1975, Jessen 1975, Bennett 1975, Traugott 1978). Hence I

would hypothesize that the logical interpropositional relations encoded by medial clauses in Panare are extensions of the basic temporal meanings, rather than reflexes of an older stage where the medial clause suffixes were adverbial clause markers indicating logical relations. The evidence for this directionality from within Panare is that the temporal relations are more inviolable than the logical or even the referential relations.

The cognitive model designated as the JOURNEY thus motivates the correspondence between cause/reason and temporal anteriority, and purpose/result with temporal posteriority. However, there is at least one other function that enters into a full specification of the use of the medial clause suffixes in Panare. This is the function of coding same or switch reference. There are three medial clause suffixes that encode subsequent action. These are distinguished by whether they code continuing reference or switch reference. For the continuing reference, subsequent action, suffixes *–séjpe* and *–sé'ñape* (see table 1), there is a distinction between actor continuity and patient continuity.

We can see in these suffixes at least one respect in which co–reference relations are motivated by similar cognitive patterns as are the interpropositional relations. The purpose and the result of an action are both logically subsequent to that action. The purpose, however, is instigated by the actor, insofar as the event is consciously and volitionally conceived by the actor as being directed towards the purpose. The result, on the other hand, may or may not be foreseen by the actor. In any case, the result of an action is registered with the PATIENT. Since the purpose for an action is the responsibility of the actor, it is understandable that the suffix that indicates actor continuity should also convey events that are purposes for previous events. Similarly, since the result of an action resides with the PATIENT, it is understandable that the patient–oriented suffix, *–sé'ñape*, should be associated with the interpropositional relation of result. For this reason I categorize *–séjpe* as indicating actor/inception/source oriented continuity whereas *–sé'ñape* indicates patient/termination/result oriented continuity.

The suffix *–ñépe*, on the other hand, normally indicates discontinuity of actor participants. It matters not whether the patient of the *–ñépe* clause is co–referencial with an argument in the previous clause. The extended interpropositional relation conveyed by a *–ñépe* clause is that

the event expressed occurs at a different place than the event expressed by the previous clause. Hence participant discontinuity is associated with spatial discontinuity.

CONCLUSION

I have dealt at some length with the discussion of medial clause suffixes in Panare as I believe it illustrates the power of Johnson's notion of image–schematic structures for explicating otherwise anomalous facts concerning the syntax, semantics and pragmatics of real languages. The beauty of this approach is, for me, that the notion of image–schematic structures (or cognitive models) is compatible with the common sense notion that drives functionalist linguistics, namely the almost naively sensible idea that meaning affects form, while at the same time providing a framework that is every bit as sound scientifically as those provided by autonomous syntactic theories. However, the underlying assumptions and concerns of these "cognitive" approaches are so radically different from those of autonomous syntactic approaches that it is inevitable that their respective areas of specialization will remain quite distinct (though they will overlap at points). Whereas autonomous theories will continue to explicate universals of abstract syntactic structures apart from the functions of those structures in communication and thinking, cognitive theories will explain universal and language–specific systematicity in formal structures in terms of the cognitive processes involved. For cognitive linguists, meaning is the starting point for syntactic investigation. Individual scholars will simply have to decide which areas of specialization correspond most directly to their own interests.

It must be added in closing that Johnson's work lies squarely within a tradition of cognitive and discourse based linguistic studies that includes such names as Bolinger, Pike, Fillmore, Rosch, Lakoff, Givón, Hopper and Thompson, Talmy, Langacker and many more. Many SIL members have already contributed significantly to the development of this tradition. A few of these who come to mind immediately are Diehl (1975), Tuggy (1981 *inter alia*) and Casad (1982). I'm sure there are more whom I am not aware of at the moment. It is the sort of approach that by its very nature, not as just an added feature, is suited to the kind of linguistic research SIL has always been involved in. This is because the approach is intensely

data–oriented. Image–schematic structures are proposed on the basis of linguistic data, then verified and refined through exposure to further data from other languages. Furthermore, data consists not only of syntactic facts, but of how the syntax functions within the cognitive and communicational environment of speech communities. To me, the recent contributions (Lakoff 1987, Langacker 1987 and Johnson 1987), though each representing the culmination of many years of lesser publications and unpublished research, mark a transition for functional linguistic studies between being a sensible but largely intuitive enterprise, into being a fully respectable scientific discipline.

REFERENCES

Anderson, John. 1973. On existence and the perfect. Foundations of language 10. 333–7.

Bennett, David C. 1975. Spatial and temporal uses of English prepositions: an essay in stratificational semantics. London: Longman Group.

Casad, Eugene H. 1982. Cora locationals and structured imagery. Unpublished doctoral dissertation, University of California, San Diego.

DeLancy, Scott. 1987. Transitivity in grammar and cognition. Coherence and grounding in discourse, ed. by Russell S. Tomlin. Amsterdam: John Benjamins. 53–68.

DeLancy, Scott. 1989. Ergativity and the cognitive model of event structure in Lhasa Tibetan. MS.

Diehl, Lon. 1975. Space case: some principles and their implications concerning linear order in natural languages. Working papers of the Summer Institute of Linguistics, University of North Dakota session 19. 93–150.

Fillmore, Charles. 1982. Frame semantics. Linguistics in the morning calm, ed. by the Linguistics Society of Korea. Seoul: Hanshin. 111–37.

Givón, T. 1983. Topic continuity in discourse: the functional domain of switch reference. Switch Reference, typological studies in language, vol. 2., ed. by John Haiman and Pamela Munro Amsterdam: John Benjamin's.

Jessen, Marilyn E. 1975. A semantic study of spatial and temporal expressions in English. Unpublished PhD dissertation, Edinburgh University.

Lakoff, George 1987. Women, fire and dangerous things: what categories reveal about the mind. Chicago: University of Chicago Press.

Lakoff, George and Mark Johnson. 1984. Metaphors we live by. Chicago: University of Chicago Press.

Langacker. 1987. Foundations of cognitive grammar. Stanford: Stanford University Press.

Longacre, Robert. 1985. Sentences as combinations of clauses. Language typology and syntactic description: volume II, complex constructions, ed. by Timothy Shopen. Cambridge: Cambridge University Press. 235–86.

Margolis, Howard. 1987. Patterns, thinking and cognition. Chicago: University of Chicago Press.

Minsky, Marvin. 1977. Frame–system theory. Thinking: readings in cognitive science, ed. by P. Johnson–Laird and N. Wason. Cambridge: Cambridge University Press. 355–76.

Payne, Thomas E. 1988. Roots and concerns of typological/functional linguistics. Notes on linguistics 42. 4–16.

Payne, Thomas E. 1989. Medial clauses and interpropositional relations in Panare. MS.

Rosch, Eleanor. 1978. Principles of categorization. Cognition and categorization, ed. by E. Rosch and B. Lloyd. Hillsdale, N.J.: Erlbaum Associates. 27–48.

Scancarelli, Janine. 1989. Marking discontinuity in Pima and O'odham (Papago). Southwest Journal of Linguistics, 9. 1–21.

Talmy, Leonard. 1988. The relation of grammar to cognition. Topics in cognitive linguistics, ed. by Brygida Rudzka–Ostyn. Philadelphia: John Benjamins. 165–205.

Traugott, Elizabeth. 1978. On the expression of spatio–temporal relations in language. Universals of language vol. 3, ed. by Joseph Greenberg. Cam, Mass: MIT Press. 369–99.

Tuggy, David. 1981. The transitivity-related morphology of Tetelcingo Nahuatl: an exploration in space grammar. Unpublished doctoral dissertation. University of California, San Diego.

NOTES

[1] See Traugott 1978 for discussion of the correspondence between spatial and temporal morphology. See Diehl 1975, DeLancey 1987 and 1989 and references therein for discussions of the cognitive relationships among agentivity, causality and temporal relations.

[2] Abbreviations used in the examples in this paper are the following:

1	First person
2	Second person
3	Third person
AN:INVIS	Animate, invisible (pronoun)
AN:PROX	Animate, proximal (specifier)
CR:ANTER	Continuing reference, anterior
CR:SIM	Continuing reference, simultaneous
DAT	Dative case
DETRANS	Detransitivizer
EXC	Exclusive ('first person' exclusive)
HC:SEQ1	High continuity, Sequential, actor oriented
HC:SEQ2	High continuity, sequential, patient oriented
I	Intransitive

IMPERF	Imperfective aspect
INAN	Inanimate
INAN:VIS	Inanimate, visible (demonstrative pronoun)
IRR	Irrealis
LC:SEQ	Low continuity, sequential
LOC	Locative
NEU	Person-neutral inflectional prefix
NONSPEC:I	Non-specific aspect, intransitive
NONSPEC:T	Non-specific aspect, transitive
OBL	Oblique postposition
PASS	Passive
PL	Plural
POSS	Possessed noun phrase
PPART	Past participle
PRO	Pronoun
TRNS	Transitive

[3] The form *i'yakae* is based on the root *yaka*, meaning roughly "other". It is the basis for many expressions dealing with perceived identity relationships between persons. The central concept that these forms embody seems to be something like "member of the same settlement group as X". In this example, the term *i'yakae* refers to three boys who are of the same race and general age as the boy who is the main character of the story to that point. We have glossed this use as "counterpart", as there is no necessary assertion that they are family members in the English sense, though *i'yakae* also applies to a person's brothers, sisters and extended family members.

[4] Many thanks to Marie-Claude Mattei-Muller for this insight. ■

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Anzilotti, Gloria Italiano. Four English/Italian Stories: Experiments in Translation. Lake Bluff, Illinois: Jupiter Press, 1983. 84 pp.

Bailey, Richard W. Dictionaries: Journal of the Dictionary Society of North America. The University of Michigan, No. 9, 1987. 279 pp.

Baltin, Mark R. and Anthony S. Kroch. Alternative Conceptions of Phrase Structure. Chicago, Illinois: The University of Chicago Press, 1989. 315 pp.

Boardman, Phillip C. (Ed.) The Legacy of Language: A Tribute to Charlton Laird. Reno and Las Vegas: University of Nevada Press, 1987. 187 pp.

Borer, Hagit (Ed.) Proceedings of the Seventh West Coast Conference on Formal Linguistics, 1988. Stanford, California: Stanford University. 389 pp.

Botha, Rudolf P. The Metaphysics Market, 1.Merchandizing Language as Matter. Spil (Stellenbosch Papers in Linguistics) No. 20, Stellenbosch 7600, South Africa: Dept. of Linguistics, University of Stellenbosch,1989. 56 pp.

—. The Metaphysics Market, 2. Billing Language as Behavioral. Spil (Stellenbosch Papers in Linguistics) No. 21, Stellenbosch 7600, South Africa: Dept. of Linguistics, University of Stellenbosch,1989. 80 pp.

Bradley, C. Henry and Barbara E. Hollenbach. Studies in the Syntax of Mixtecan Languages, Vol. 1. Dallas, Texas: The Summer Institute of Linguistics and The University of Texas at Arlington, 1988. 449 pp.

Carston, Robyn. Working Papers in Linguistics, Vol. 1 1989. University College London, Department of Phonetics and Linguistics: Linguistics Section. 354 pp.

DeFrancis, John. Visible Speech: The Diverse Oneness of Writing Systems. Honolulu, Hawaii: University of Hawaii Press, 1989. 306 pp.

Dixon, R. M. W. A Grammar of Boumaa Fijian. Chicago, Illinois: The University of Chicago Press, 1989. 375 pp.

Edmondson, Jerold A. and David B. Solnit. Comparative Kadai: Linguistic Studies Beyond Tai. The Summer Institute of Linguistics and The University of Texas at Arlington, 1988. 374 pp.

Egner, Inge. Analyse conversationnelle de l'echange reparateur en wobe. Cote d'Ivoire: Peter Lang, 1988. 268 pp.

Fromkin, Victoria and Robert Rodman. An Introduction to Language, Fourth Edition. New York: Holt, Rinehart and Winston, Inc., 1988. 474 pp.

Griffen, Toby D. Germano–European: Breaking the Sound Law. Carbondale, Ill.: Southern Illinois University Press, 1988. 271 pp.

Grimes, Joseph E. (Ed.) Sentence Initial Devices. The Summer Institute of Linguistics and The University of Texas at Arlington, 1986. 233 pp.

Gronnum, Nina [Thorsen] (Ed,) Annual Report of the Institute of Phonetics, University of Copenhagen. 96, Njalsgade, DK 2300, Copenhagen, 1989. 156 pp.

Hilbert, David R. Color and Color Perception: A Study in Anthropocentric Realism. Chicago, Illinois: The University of Chicago Press, 1988. 141 pp.

Huddleston, Rodney. English Grammar, an Outline. New York: Cambridge University Press, 1988. 212 pp.

Ingram, David. First Language Acquisition. New York: Cambridge University Press, 1989. 572 pp.

Kenstowicz, Michael J. (Ed.) Studies in The Linguistic Sciences. Urbana, Illinois: Department of Linguistics, University of Illinois. 177 pp.

Lienhard, Siegfried. Songs of Nepal: An Anthology of Nevar Folksongs and Hymns. Honolulu, Hawaii: University of Hawaii Press, 1984. 217 pp.

Marches, Lynell. Tense/Aspect and the Development of Auxiliaries in Kru Languages. Dallas, Texas: The Summer Institute of Linguistics and The University of Texas at Arlington, 1986. 301 pp.

Mayerthaler, Willi. Morphological Naturalness. Ann Arbor, Michigan: Karoma Publishers, Inc., 1988. 150 pp.

McCawley, James D. The Syntactic Phenomena of English, Vol. 1. Chicago, Illinois: The University of Chicago Press, 1988. 366 pp.

—. The Syntactic Phenomena of English, Vol. 2. Chicago, Illinois: The Univesity of Chicago Press, 1988. 768 pp.

O'Grady, William. Principles of Grammar & Learning. Chicago, Illinois: The University of Chicago Press, 1987. 233 pp.

Oosthuizen, Johan. An Interpretive Analysis of Quantifier Postposing Phenomena in Afrikaans. Spil (Stellenbosch Papers in Linguistics) No. 19. Stellenbosch 7600, South Africa: Dept. of Linguistics, University of Stellenbosch, 1989. 295 pp.

Paikeday, Thomas M. The Native Speaker is Dead! Mississauga, Ontario: Paikeday Publishing Inc., 1985. 109 pp

Pereira, Fernando C.N., and Stuart M. Shieber. Prolog and Natural-Language Analysis. Chicago, Illinois: The University of Chicago Press, 1987. 266 pp.

Schuessler, Axel. A Dictionary of Early Zhou Chinese. Honolulu, Hawaii: University of Hawaii Press, 1987. 876 pp.

Staal, Frits. Universals: Studies in Indian Logic and Linguistics. Chicago, Illinois: The University of Chicago Press, 1988. 267 pp.

Tannen, Deborah. Talking voices: Repetition, dialogue, and imagery in conversational discourse. - (Studies in interactional sociolinguistics) Cambridge: Cambridge University Press, 1989.

Uszkoreit, Hans. Word Order and Constituent Structure in German. Chicago, Illinois: The University of Chicago Press, 1987. 190 pp.

■

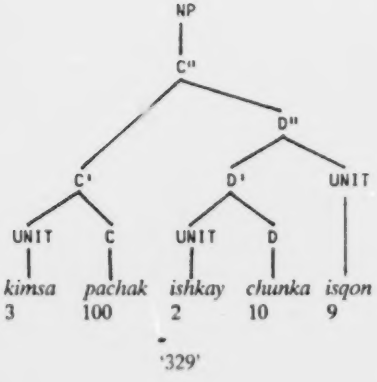
197

ERRATA

Correction to: **Computing In Linguistic, Lex, Yak, and Quechua Numeral Phrases** by David J. Weber; in NOL #47

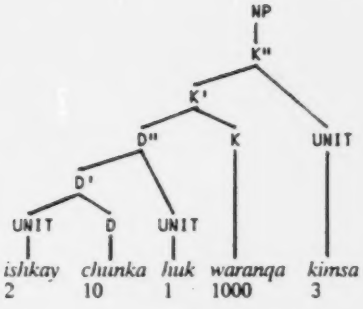
The three tree diagrams on pages 34 to 36 (NOL 47) were poorly formatted, making the first two unintelligible and the third one difficult to read. We apologize to the author and to our readers for this error. The following are corrected versions as supplied by the author:

On page 34:



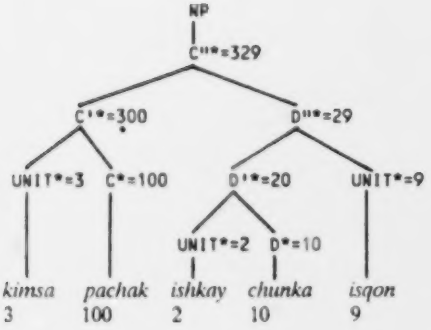
'329'

On page 35:



'21003'

On page 36:



'329'

■

NOTES ON *LINGUISTICS*

NUMBER 51 **NOVEMBER 1990**

CONTENTS

COORDINATOR'S CORNER Eugene Loos 3

A LETTER TO THE EDITOR Charles Peck 4

ARTICLES

PRIMER FORMATTING WITH MICROSOFT WORD Bryan Harmelink 5

HOW TO COMPILE AND EDIT A BIBLIOGRAPHY Alan C. Wares 17

RESEARCHING QUOTE STYLES Ursula Wiesemann 31

REPORTS

THE VIII LAILA *SYMPOSIUM AND THE XII* TALLER MAYA Wesley M. Collins 39

THE 1990 GEORGETOWN UNIVERSITY ROUNDTABLE ON LANGUAGE AND LINGUISTICS Carol Orwig 42

THE INTERNATIONAL PRAGMATICS CONFERENCE Inge Egner 51

REVIEWS AND ANNOUNCEMENTS

NATURAL LANGUAGE PROCESSING IN THE 1980'S: A BIBLIOGRAPHY, by Gerald Gazer, Alex Franz, and Karen Osborne Michael Maxwell 65

OBSERVING AND ANALISING NATURAL LANGUAGE: A CRITICAL ACCOUNT OF SOCIOLINGUISTIC METHOD, by Leslie Milroy J. Stephen Quakenbush 53

TWENTIETH ANNUAL LINGUISTICS SYMPOSIUM, University of Wisconsin–Milwaukee 30

1990 RELATIONAL GRAMMAR BIBLIOGRAPHY Steve Marlett 36

THE THIRD LASU *CONFERENCE/WORKSHOP* 68

INTRODUCING ALIGN, *A NEW PROGRAM FOR CHARTING TEXTS* Ron Moe 69

HOW TO OBTAIN HARD TO FIND TECHNICAL ARTICLES Margaret Lowe 70

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Coordinator's Corner

Given the title "Primer Formatting With Microsoft WORD", you might wonder why such an article should appear in Notes On Linguistics. Primer formatting isn't a prime concern of linguistics. By reading closely, however, you will discern the parallel between the problems of primer formatting and the problems of creating a communicative linguistics treatise such as a pedagogical grammar. There is much to be exploited for linguistics in Bryan Harmelink's article that we put it where it is easily noticed.

The assistant editors report that the most frequently reoccurring problem with articles received for NL is error in the treatment of bibliographical references. They find inaccuracies of spelling or dates, missing data, and sometimes completely missing references. This is understandable given the inaccessibility of even the card file listings of libraries, the lack of help available for checking one's references, and uncertainties about the format for the information. We hope that Alan Wares contribution "How to Compile and Edit a Bibliography" will be appreciated as a valuable resource.

On a related subject, we are embarking on an endeavor to provide a classification guide for linguistic books, in the form of a hierarchically structured list of linguistic terms. The terms come with definitions extracted from linguistic literature. So far, we have found about 1750 usable terms, apart from the special jargon peculiar to specific linguistic theories. This guide should serve to overcome the ambiguities that our field libraries face simply because the ERIC librarians' thesaurus provides only four major divisions into which they must classify all linguistic works. One of the goals is to allow each SIL field linguist to have on diskette a complete listing of all the holdings of their branch library and other cooperating libraries. This will enable authors to check all the bibliographical information for their articles while out on location.

Incidentally, SIL members, don't miss Margaret Lowe's announcement about the cure to finding and getting hold of articles that you would like to have.

The variety of reviews and announcements in this issue should be a help to those interested in trying to keep up with developments. The announcement by Ron Moe about Align, however, is of a different nature: Bev Cope has written a utility for making optimized charts from standard format-demarked text. It needs to be given a strong field test to see if it will be found useful.

— Eugene Loos

A Letter to the Editor

Lou Hohulin's review of George Lakoff's *Women, Fire and Dangerous Things* in a recent issue of *Notes on Linguistics* [42, 65–72] was good and I commend her on it. But I think she missed the political import of the book. Namely, who was the most objectivistic linguist in George Lakoff's history? It was none other than the early Noam Chomsky.

The fifties and sixties were an exciting time in intellectual circles. I got in on it when I went to the University of Michigan in 1961. We had Chomsky's generative grammar that made linguistics amenable to mathematics and logic. We had computers and automata theory. We had Information Theory, Fourier Transforms and LaPlace Transforms. We had Cybernetic feedback circuits in living organisms. We had learning curves in psychology that could be described mathematically. All the objectivism of the hard sciences was going to be applied to the human sciences. And we were going to solve the problems of the world.

The disillusionment came in our department in the late sixties. It came to the M.I.T. linguists in 1969. Some of the M.I.T. students tried to rescue Objectivism with Generative Semantics, but it too proved to be unsatisfactory in three or four years.

Now George Lakoff and Mark Johnson are explaining why Objectivism failed in language study. Lakoff uses Prototype Theory and "Idealized Cognitive Models" (Mark Johnson calls them "Image Schemata" Theory (*The Body in the Mind*, p.2–ff.)) to examine facets of language that could never be modeled by any mathematical system, derivation tree or formula. Lakoff and Johnson don't say the Objective approach was wrong. They say that it handled too thin a slice of real data to be truly interesting. It handles only a small subset of language problems.

And I think that is true. It was a feeling that there were too many counterexamples that were being assigned to "Performance" that made the young linguists unhappy in 1969. The same feeling has troubled various philosophers since the time of Kant.

Janet Keller, in her review of Johnson's book in *Language* 64:4, 775–8, connects Johnson's work with that of the psychologists Piaget and Vygotsky, but says that Johnson's work is new and awaits being fully worked out. It will be interesting to see where it leads.

CHARLES PECK
July, 1989

202 A

PRIMER FORMATTING WITH MICROSOFT WORD

BRYAN HARMELINK

INTRODUCTION

The editing features of Microsoft WORD[1] make it a versatile and powerful tool for handling a wide variety of data and text files. WORD also provides the user with a lot of formatting capabilities which can be used from the very beginning stages of editing right through the publication stage.

This article will deal with the task of formatting a document such as a primer, a pedagogical grammar, or any linguistic treatise with peculiar requirements for the display of information. Several options and recommendations for handling different kinds of paragraphs and character styles will be given. The formats that will be discussed assume that a *style sheet* will be used. Building a WORD style sheet specifically to match your task can help you to consistently repeat identical styles in complex documents. This article is not intended to be a set of how–to instructions, but rather a glimpse of what is possible with WORD. Consult the WORD manual's section on style sheets if you are not already using them.

There are three main features of WORD to be discussed in this article:

1) using the **Format Border** command;

2) doing columns with **Format Tabs**; and

3) using **side–by–side paragraphs**.

For the sake of our discussion here, consider the following samples of paragraph styles which might be used in a primer. Examples using these types of paragraphs will be shown later on:

Paragraph Type	Format key	Paragraph format
Lesson Title	t	14 point, bold, left justified, leaving 2 blank lines after the paragraph
Key Word	k	14 point, bold, centered paragraph, with a 1.5" box, leaving 15 blank lines before it to allow space for drawing
Vocabulary	v	12 point, 2 column double spaced paragraph with tabs set at 1.5" and 4"
Syllables	s	12 point, bold, with vertical tabs at 1" intervals and centered tabs between these, boxed around, leaving 2 blank lines before and after
Section heading	h	12 point, left justified, leaving 1 blank line before and 1 blank line after
Instruction paragraph	i	12 point italics, left justified with 0.5" 1st line indent, leaving 1 blank line after
Analysis or Word building Exercise 1 (left)	e	12 point, left justified, 4" right indent, tab set at 0.5", 1 line after, box around paragraph
Analysis or Word building Exercise 2 (right)	f	12 point, left justified, 4" left indent, tab set at 4.5", 1 line after, box around paragraph
Sentence drill	d	12 point, left justified, 0.5" hanging indent, 1 line after
Reading	r	12 point, left justified, 0.5" 1st line indent, double spaced, leaving 15 blank lines before for drawing

A
203

The paragraph styles described above are only examples to demonstrate the possibilities that WORD provides. Actual paragraphs will be shown at the end of this article.

WORD allows the user to specify formats for characters, paragraphs, and divisions. These formats may be applied to the text by using the *speed formatting keys* which are all combinations of **Alt** and another key. For example, **Alt–b** for bold, **Alt–i** for italic, **Alt–j** for a justified paragraph, **Alt–c** for a centered paragraph, etc. If you prefer, these same formats and others can be manually selected through the commands which are described below.

Format Character

Through the **Format Character** command, you can select bold, italic, underline, caps, and combinations of these character styles.

Format Paragraph

The characteristics of any paragraph in your document can be chosen by using the **Format Paragraph** command. You can set the paragraph indents, the first line indent, the line spacing, the space left between paragraphs, etc. If you are using a style sheet, the character style which you want in a given paragraph can also be set. This allows you to have paragraphs preset to have consistent character fonts and sizes as in the examples listed above.

Format Division

The **Format Division** command is used to determine the overall layout for your document such as the page length, placement of page numbers, headers and footers, line numbering, multiple columns, etc.

FORMATTING YOUR PRIMER

This section is devoted specifically to the topic of formatting a primer or any other complex document which has charts or has a wide variety of paragraph styles. The **Format Border** command of WORD will be discussed first. What you can do with **Format Border** will then be applied in the following sections.

Format Border

Format Border is the option of WORD that allows the format of a paragraph to include a variety of border or frame styles. Lines may be added above, beneath, on the right or left side, or on all sides as a box. The border formatting can be included in the style sheet so that it is obtained by one key stroke, along with all of the other paragraph formatting.

The options provided by **Format Border** give you the following possibilities:

FORMAT BORDER Lines

| left

right |

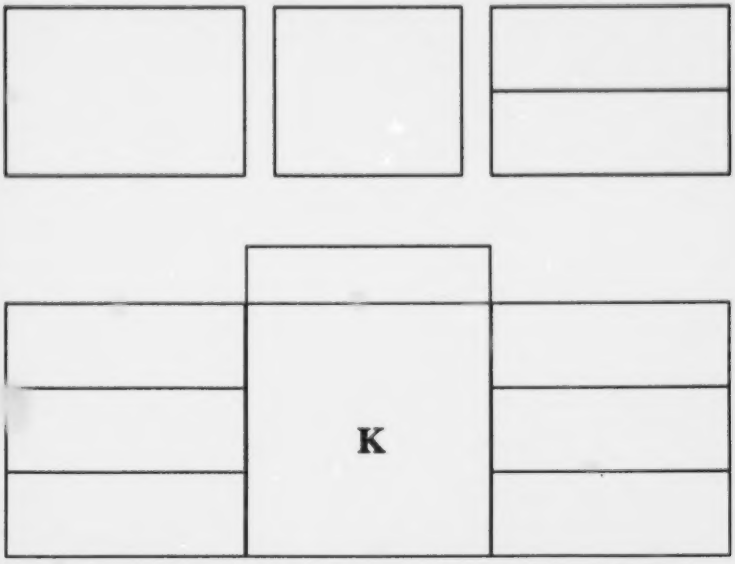
---

above

below

Combinations of the above lines can be used to give different effects as well as using the **Format Border Box**, which automatically gives a box that encloses the paragraph.

The dimensions of the box can be changed by modifying the left and right indents through the **Format Paragraph** command. If no changes are made in the paragraph indents, the box will extend all the way across the printed area of the page. In order to make boxes higher than one line, you must use **<Shift><Enter>** for a new line rather than **<return>**. The text within the box can still be formatted normally: with justification, first line indent, hanging indent, etc. Different combinations of boxes and text can be used across the page to fit your formatting needs. Some examples follow:



You should experiment with **Format Border** to see the different combinations you can use. You won't want to include boxes in every document, but they can help to highlight certain paragraphs.

Remember as you work with **Format Border** that it is considered part of the *paragraph format*. This means that the border you have in one paragraph will be repeated upon pressing **<enter>**. It's also necessary to keep this in mind if you work with borders around more complex sets of paragraphs. For example, if you want several paragraphs to have hanging indents type within one box, you need to format the top, middle and bottom paragraphs separately. Since the hanging indent affects the first line of a *paragraph*, each paragraph can have only one hanging indent. The formats for the following example are:

Top:	FORMAT BORDER Lines: left, right, above
Middle:	FORMAT BORDER Lines: left, right
Bottom:	FORMAT BORDER Lines: left, right, bottom

These paragraphs demonstrate the above formats using a half inch hanging indent. Hanging indent paragraph are typically used in bibliographies, and in some other cases:

> This is a paragraph using **Format Border Lines left**, **right**, and **above** to make the top of the box.
>
> This paragraph has **Format Border Lines left** and **right** to make the sides of the box. This boxed paragraph can be used for as many middle paragraphs as you need.
>
> A hanging indent is where you indent all but the first line.
>
> This paragraph has Format Border Lines left, right, and below to make the bottom of the box.

Note that the box in the example above has not been closed on the sides in order to show the paragraph divisions. The blank lines are the result of inserting paragraphs with the **Format Border** command set to **None**. Deleting these blank lines would close the box.

Multiple Columns using Format Tabs

One of the quickest ways to set up multiple columns in WORD is to use the **Format Tabs** command. You can either type the columns of a chart prior to formatting the tabs or preset the tabs before making the chart. If you are making several column sections in a primer, you will most likely want to format the tabs as part of a paragraph style in a style sheet to ensure consistent formatting.

One of the advantages of using tabs between columns is that the charts are much more flexible than if the columns are separated by spaces. Indeed printers will not properly format a chart having spaces if you are using a proportionally spaced font. Using tabs alone can also produce an improperly formatted chart, thus making it necessary to use the **Format Tabs** command to align the tabs.

The **Format Tabs** command only has jurisdiction within the paragraph for which the tabs were specified. If you move to another paragraph with the arrow keys or with the mouse, the tab formatting will be different. If you have a ruler at the top of the window in

which you are editing you will be able to see that the tab measurements appear and disappear as you move from paragraph to paragraph.

When you use **Format Tabs**, you will see the following sub–menu of options:

FORMAT TAB: Set Clear Reset-all

If you choose Set, you will then see:

FORMAT TAB SET position:
alignment: (Left) Center Right Decimal Vertical Leader char: (Blank) . - _

The different **Format Tab** options are discussed in the following sections.

FORMAT TAB: Set

The **Format Tab Set** command permits you to enter the position measurement for the tab(s) that you want in one paragraph or in a series of paragraphs. There are a variety of other options available to you at the time the tab is set; these are discussed below.

FORMAT TAB: Clear

This command removes all of the tab settings in the paragraph in which the highlight is found. Use this command when you want to start all over with tab settings.

Additional Options

There are other options open to you in the **Format Tab Set** menu for the alignment of the tabs. Any combination of alignments can be used in the same paragraph. The first one could be centered, the second tab left, the third one vertical, and so on. In the sections that follow, these alignments are discussed, showing the effect they have in a sample paragraph.

alignment: Left

Left alignment is the most commonly used for charts and tables, giving the following effect:

rakiduam	mütrümngelay
rakin	akuwelay
che	rupawelay
witranngen	ka
küpan	amun

alignment: Center

Center alignment of a tab can give the following effect in a chart:

rakiduam	mütrümngelay
rakin	akuwelay
che	rupawelay
witranngen	ka
küpan	amun

alignment: Right

Right alignment can highlight the endings of words. It is useful in certain kinds of primer charts where the syllables in focus need to be aligned at the end of the words rather than at the beginning:

rakiduam	mütrümngelay
rakin	akuwelay
che	rupawelay
witranngen	ka
küpan	amun

alignment: Decimal

The decimal alignment option may prove useful in charts which have the syllable or morphological structure in focus. The decimal alignment was intended primarily for use with numbers, but it can also align words in the same way:

raki.duam	mütrüm.ngelay
ra.kin	aku.welay
che	rupa.welay
witran.ngen	ka
kü.pan	amun

alignment: Vertical

The **alignment: Vertical** command makes the following kind of chart easy to format. Choosing **Format Tab alignment: Vertical** places a vertical line at the specified measurement. The following chart has Vertical tabs at on inch intervals starting at one inch and centered tabs at one inch intervals starting at one half inch. The paragraph containing the chart then is completed by choosing **Format Border Box**, which encloses the chart. The chart can be increased in height merely by using **<Shift><enter>** to make a new line; The chart can be repeated by pressing **<enter>**.

ma	me	mi	mo	mu	mü

Side–by–side Paragraphs

The side–by–side paragraph (henceforth **sbs**) is another formatting feature provided by WORD that can be used advantageously in formatting a primer. This feature gives you great flexibility in working with multiple columns where you have different amounts of information in columns that you want to keep together. The box chart example in the Format Border section above was done using **sbs** paragraphs.

It is perhaps easiest to think of **sbs** paragraphs as boxes lined up across the page. The left side of one box can't overlap the right side of the next box and vice versa. One of the most important things to do before working with the sbs paragraphs is to know:

---

1) the margin measurements;

2) how many sbs paragraphs you need across the page, and;

3) what the measurements of each paragraph will be.

Let's work with the following formatting needs:

1) Left margin: 1.25", right margin: 1.25", leaving a printed area 6" wide on an 8.5 x 11 page;

2) 3 sbs paragraphs are needed, leaving only minimal space between;

3) Each paragraph needs to be 1.5" wide.

The total width of the paragraphs is 4.5 inches, leaving 1.5 inches of the printed width for space between the paragraphs. If we decide to have the first and third paragraphs aligned with the margins, that leaves .75 inches between the paragraphs. Now we can go to the Format Paragraph menu and enter the following values for each of the three paragraphs (the fields with values not needed for this example are shown blank):

Paragraph aligned with left margin:

FORMAT PARAGRAPH alignment: Left Centered Right Justified

left indent: **0"**	first line:	right indent: **4.5"**
line spacing:	space before:	space after:
keep together:	keep follow:	side by side (**Yes**) No

Center paragraph:

FORMAT PARAGRAPH alignment: Left Centered Right Justified

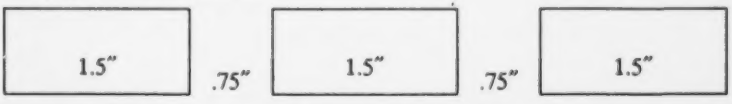
left indent: **2.25"**	first line:	right indent: **2.25"**
line spacing:	space before:	space after:
keep together:	keep follow:	side by side (**Yes**) No

Paragraph with right margin:

FORMAT PARAGRAPH alignment: Left Centered Right Justified

left indent: **4.5"**	first line:	right indent: **0"**
line spacing:	space before:	space after:
keep together:	keep follow:	side by side (**Yes**) No

The above measurements are much easier to see if we lay it out on the page with the frames:

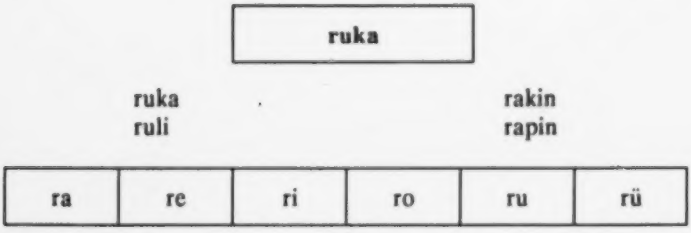


This example shows the importance of knowing the paragraph and margin measurements. If you have different sizes of paragraphs with varied distances between them, don't try to enter the values into **Format Paragraph** without having first determined the measurements.

Many different combinations of **sbs** paragraphs can be used depending on the your needs. **sbs** paragraphs may be combined with the **Format Border** option to provide yet another useful tool for primer formatting.

What follows is a section showing examples of the paragraphs described above, using possible text and primer material. Remember that the style of each of the characters and the paragraphs below may be obtained by using *one key stroke*.

Lesson 12–Rr



Exercise 1

ra rakin rapin	ru rukin rume

Exercise 2

In this exercise, focus on the use of the letter r:

1. Rume a**r**egney pu **r**uka.
2. Tüfachi **r**ali **r**ume **r**üngengey.
3. Rakingelay ta wangülen.

Reading

Alün ku**r**a müley **r**üpü mew. Re ku**r**a müten müley. Kümelay ta ka**r**etatun mew. Ka **r**ume kut**r**ankawi ta mansun ku**r**a mew.

NOTE

[1] "Microsoft" is a registered trade mark and "Microsoft Word" is a copyrighted product of Microsoft Corporation. ■

HOW TO COMPILE AND EDIT A BIBLIOGRAPHY

ALAN C. WARES

S.I.L. Bibliographer

1.0 INTRODUCTION

What is being discussed in this paper is not a **catalogue of publications** but a **bibliography**, whether the latter be a volume in itself or a list of bibliographical references appended to an article in a journal or a collection of articles. A catalogue is a list of titles available, usually for sale by a publisher, whereas a bibliography is a scholarly listing of articles and monographs by one or more authors. The catalogue includes titles of bound volumes and occasionally names of journals; it rarely includes offprints of articles from journals or from collections of articles. It may also include an International Standard Book Number (ISBN) or Serial Number (ISSN) and the sales price of the volume. These commercial concerns are not generally included in a bibliography whose primary focus is the publication and its contents.

This is not to say that a catalogue is of no interest to the bibliographer; on the contrary, much of the content of a bibliographic entry may be gleaned from a good book catalogue, as well as something of the content of the publication itself. A catalogue may be a useful source to the compiler of an annotated bibliography, but it should not be used as a substitute for the publication itself.

My experience as an editor and bibliographer has made it evident that many writers – even Ph.D.'s – have no clear notion of how to compile a bibliography or a list of bibliographical references. The latter term refers to items that have been referred to in an article or monograph; the former is a broader term for a bibliographical list of any kind. If the writer includes a list of references, publication of his work will be facilitated if the editor doesn't have to fill in gaps in the bibliography or to verify dubious data.

The author should attend to bibliographical references right from the beginning, not after the article or monograph is completed. Every reference or citation should be fully identified, either in the text itself or on a list separate from the main work. This is especially necessary when the author leaves the manuscript with an editor and takes off for parts unknown where he may not be reached for weeks to answer a simple question from the editor.

As you read books and articles related to your subject, keep accurate records even if you don't expect to quote verbatim from the work you are reading. It is easier to do this as you read than it is afterwards when the accumulation of references tends to blur the recollection of one in particular. Jot the information down on a 3x5 slip, one for each reference. The collection of slips will help you compile your bibliography or list of references, and in the case of a monograph, may remind you of items or proper names to include in the index.

It is of utmost importance to record accurately the bibliographical information you are going to include in your article or monograph. Nothing is more frustrating to a scholar than to spend hours looking for an item that is listed in a bibliography, only to find that the compiler misspelled the name of the author or gave the wrong date or omitted entirely the place of publication. Accuracy is especially important when searching for an item on a database, because the computer is an aggravatingly literal piece of equipment. If you look for an author named Johnson when the name was actually Johnston, you will not find the particular work you're looking for. So check and double check all your annotations, both when you first make them on a 3x5 and later when you compile your list of references or your bibliography.

One source of bibliographical data for your own bibliography is someone else's bibliography or list of references. There is one caveat to this: don't presume that the bibliography you copy from is entirely accurate – not even the *Bibliography of the Summer Institute of Linguistics* (even though I have done my utmost to avoid inaccuracies in each edition I've been responsible for). In one case I accepted partial information as complete, only to discover later that the bibliographical entry was entirely misleading. In another, the wrong computer code (an upper case letter instead of lower case, or vice versa, I think it was) resulted in giving an incorrect source for several items that had been published in the same journal.

The following information mainly concerns the compilation of the *Bibliography of the Summer Institute of Linguistics*, and is not an inflexible rule for every bibliography, but what is set forth here can be of value to any writer who has to compile one. Matters of format can be altered without changing the informational content of the bibliography.

2.0 ORDER OF ITEMS IN AN ENTRY

A bibliography entry is basically an answer to an array of questions: **Who is the author? What did he/she write? When was it published? Where was it published** and **who was the publisher?**

Of primary importance, at least in literature pertaining to the humanities, is the first of the above questions: **Who is the author?** Usually the first item in the entry is the name(s) of the author(s). However, in some technical and scientific journals, the title of the article is considered of primary importance, so it appears first in the entry.

What did the author write? is the next question of importance in the classical bibliography, so the second slot is reserved for the title of the article or monograph. In reference lists, however, **When was it written?** is given second place because works by the same author can then be arranged chronologically and give some indication of the development of an author's theories.

Where did the item appear? is another question the bibliographical entry must answer. For a monograph this refers to the place of publication. For an article it refers either to the name of a journal or to the title of a volume that is a collection of articles by different authors. A monograph may also be part of a series of works, and this information is listed before the actual place of publication.

The next question to be answered by the bibliographical entry is **Who was the publisher?** There may be other questions, such as **Who translated this work?** or **Who edited it?**

Finally, the concerned scholar wants to know **how many pages** the monograph contains or the **volume number** (perhaps the issue number) of the journal and the **pagination** of the journal article. In

summary, these are the component parts of the bibliographical entry which will be dealt with in greater detail in the following sections.

3.0 THE AUTHOR(S)

The first place in the entry has to do with the person (or persons) chiefly responsible for the work in question, whether as author, editor, compiler, or translator.

3.1 The author's name

The family name of the author appears first in the entry, followed by a comma and the given name: Doe, John. Do not use a title such as Mr., Mrs., Father, Sir, or whatever, and if there is more than one person of the same name in the family, do not use the designation Sr., Jr., III, even if the name at the head of the article or on the title page of the book is "John Doe, Jr." or "William Brown III."

3.1 Nicknames

In a bibliography of scholarly works, it is preferable to use the given name rather than a nickname or an abbreviation: "O'Brien, Michael" not "O'Brien, Mike." This is a general rule which may be disregarded when an author prefers to be known by his nickname. Presumably the sixteenth–century poet Jonson was christened Benjamin, but he is never known by anything other than Ben Jonson.

3.2 Foreign names

Names of authors that appear in the S.I.L. bibliography are spelled using the roman alphabet, with no attempt to follow the orthography of indigenous languages that use phonic symbols in the spelling of names. There is precedent for this in that when Greek or Russian names are used in the context of an English bibliography, they are transliterated. So likewise in the *Bibliography of the Summer Institute of Linguistics* we will use a near equivalent, such as an i for a barred i, an e for an epsilon, and so on. This is not disparaging exotic names, but following the usual practice of spelling them with the roman alphabet. Diacritical marks such as accents or diereses can be used, but not unusual characters.

3.3 The order of names

When more than one name appears at the head of an article or on the title page of a book, the one listed first is used first in the entry. The name of the first author will be in the order of surname, comma, given name. The name of a second author will be given in normal order, preceded by "and":

Doe, John and Jane Doe.

If there are three or four names, they are separated from one another by semicolons, with an "and" preceding the final name:

Doe, John; Mary Doe; Richard Roe; and Rachel Roe.

Generally if there are more than three authors, only the first is used, followed by "and others" or "et al." The S.I.L. Bibliography uses the English term.

3.3 Putative authors

If the author's name does not appear on the publication, but is known from other sources, it is listed in the same way as above, but in square brackets, showing that it has been supplied by the compiler. If the work is a compilation such as an annual branch report, the name of the branch director is generally placed in the author slot as the one primarily responsible for the report.

4.0 TITLES

It may be well here to define our terminology. A published work may be either an article or a monograph. An article may be published in a journal or in a collection of articles. A monograph, according to the *Reader's Digest Great Encyclopedic Dictionary* (c.1966) is "a book, pamphlet, or treatise on one subject or on a single aspect of a subject." It is a work by one or more authors published by itself or as part of a series.

If different authors publish a number of articles in the same volume we consider that to be a collection of articles, even though the articles may bear some relationship to one another, as for example if Smith's article is on the phonology of language X, Jones's on the verb structure of X, and Brown's on a description of the ethnography of

the speakers of X. If all of the articles in a given collection are included in the bibliography, we call the volume an analyzed collection. Some collections contain articles on a wide variety of topics, all of them written in honor of some individual who has been noted in his field, and probably published to celebrate a notable occasion, such as a birthday. This kind of collection is called a *Festschrift* in German or a *mélange* in French.

4.1 The monograph

The title of a book or monograph is printed in italics. In manuscript, it is underlined. It is taken from the title page of the book, not from the cover, which may have a different title or a variation of the title. When occurring in a title, a word or phrase that would normally be italicized is printed in roman type. Monographs may be unique, or they may form part of a series of works, usually having a common theme, as with the Summer Institute of Linguistics Publications in Linguistics [and Related Fields].

4.2 The collection of articles

If a volume contains a number of articles by different authors, it has presumably been edited by someone. The name of the editor should appear on the title page, but if it is not to be given prominence it may appear on the copyright page or at the end of a preface or introduction. In cases where no editor's name appears, or the editor is unknown, the authorship of the volume may be cited in the bibliographical entry as "John Doe and others," where John Doe is the name of the author of the first article in the book.

4.3 The series title

The title of a series is given in roman type, neither underlined nor within quotation marks. Following the series title without any punctuation is the number of the publication within the series, as: International Museum of Cultures Publication 32. The editor of the series may appear following the series title and number, separated by a comma, as John Doe, ed.

219

4.4 The article

Although some modern journals make no distinction between an article and a monograph as regards format, it has been common practice (and I think it is a help to the reader) to place titles of articles between double quotation marks. This is the practice followed in the S.I.L. Bibliography, for example: "A problem in Buang morphology." Double quotes are used whether the article appears in a journal or in a collection of articles. It is customary also to use quotes around titles of theses and dissertations.

5.0 THE JOURNAL NAME

In a list of references it is best not to abbreviate journal names, but in a lengthy bibliography abbreviations should be used and a list of abbreviations given in a separate section of the book.

Care must be taken with journal names in order that similar sounding names not be confused, such as *Journal of African Languages* and *Journal of West African Languages*. Publishers may change the name of their journal, as in the case of *Kivung*, published in Papua New Guinea, which is now *Languages and Linguistics in Melanesia*. The entry should reflect the journal name in which the article appeared, and the change of name should be noted in the list of serial publications given elsewhere in the bibliography.

6.0 THE PUBLISHER'S LOCATION

The name of the publisher and the place of publication are generally found in the imprint at the foot of the title page. Some publishers omit the place of publication altogether, whereas others may list two or three locations, such as The Hague or Berlin (or even New York) for Mouton. Place of publication should refer to a city or town, not to a country. The only time a state or country is mentioned in an entry is when there may be confusion as to which of two cities is meant, as Cambridge, Massachusetts or Cambridge, England (If the publisher is M.I.T., of course, it is unnecessary to indicate which city is meant).

When the entry concerns an article in a journal, it is not necessary to include the location of the publisher; that may be given in a separate

section of the bibliography or, if desired, within parentheses or square brackets at the end of the entry. The former is preferable unless the name of the journal occurs only once or twice in the list and is a relatively unknown publication.

7.0 THE PUBLISHER

The name of the publisher usually appears in the imprint at the bottom of the title page of the book. When it is omitted there for some reason, it may be found on the copyright page (back of the title page), preceded by the words "published by". In the bibliographical entry, the name of the publisher follows the place of publication, separated from this by a colon and a space. Strangely enough, some books have no publisher's name to be found anywhere in the book, so the only recourse is to put n.p.l. or npl (no publisher listed) in that slot.

It should be noted that the printer is not necessarily the publisher. The printer performs the physical operation of reproducing on paper the copy he is given and binding it into books, but may have no responsibility for its contents or accuracy. Often, too, the cost of production may be borne by a philanthropic agency, but that agency is not the publisher and should not be designated as such in the bibliography.

8.0 THE DATE OF PUBLICATION

It is important to know when an item was published. Usually the year of publication is sufficient. For a monograph, the date of publication may be given on the title page. If not found there, the copyright date may be accurate enough, especially if the volume is a first edition. Unfortunately some publications appear without any date, copyright or otherwise, so the bibliographer may choose either to indicate that fact by n.d. (no date) or, if the year of publication is known but not to be found in the volume, he may place it within square brackets (as [1989]) to show that it has been supplied by the compiler of the bibliography.

In a classical literary bibliography, the date is generally supplied following the publisher's name or after the pagination in a journal,

but its placement in your bibliography may depend on other factors which are discussed below.

9.0 PAGINATION

The number of pages of a given work is expressed in different forms, depending on whether the work is a book or an article.

9.1 Pagination of a book

The pagination of a book may be the same as the number appearing on the last page of the book. If the front matter (title page, contents page, preface or introduction, etc.) is numbered with roman numerals, the number on the last page of the front matter is included, followed by a comma and the number of the last page of text. The only exception to this occurs when the pagination in arabic continues where the roman pagination leaves off; e.g., when the front matter is numbered to page xii and the next page, on which the text begins, is page 13. In this case, the pagination of the book is equal to the number on the last page of text, as if the page numbering had been done uniformly with arabic numerals. Do not ever give the pagination of a book in a bibliography entry as the total of both roman and arabic numbers or of separately numbered sections of a book. For example, if the book has nine pages of front matter, the last of these pages being page ix, and 153 pages of text, the correct designation is ix, 153 pp.

If the book has an appendix that begins with page 1, pagination of the book includes the number of pages of appendix. This follows the regular pagination, separated from it by a comma, and followed by pp. (the abbreviation for pages).

If the last numbered page of the book is followed by one or more pages of maps, do not add this number to the total pagination: it is usually sufficient to add the word "maps" to this part of the entry.

Pagination of works whose pages are printed on one side of the paper only is indicated by using the abbreviation ll. (double-el for "leaves", not number eleven). This is common for theses and dissertations as well as some trial editions of vernacular material.

Blank pages are included in the numbering of pages of a book with the exception of the last page if it is blank. Thus, if the printed text ends on page 213, the final page would be 214 (assuming that all left-hand pages have even numbers), but being blank it is not counted in the pagination of the book.

If the pages of a book have no number anywhere on them, do not count them and report the pagination as that sum. Rather, the abbreviation n.p. (not paginated) should be used.

9.2 Pagination of articles

The pagination of an article in a book is usually given as the first and last pages of the article, separated by a hyphen (an en-dash in the printed list). In some collections the editor may have chosen to include a title page before the text of each article: that is, there is the title of the article on a right-hand page, a blank page follows, and the text begins on the next right-hand page. We have chosen to count the pagination as beginning with the number of the title page of the article.

If you have only an offprint (reprint) of an article to go by in compiling a bibliography list, do not count the number of pages of text and consider that to be the pagination of the article. Sometimes a printer will renumber pages of an offprint, with each article in the volume beginning with page one. The bibliographer should be aware of that practice and try to get the data from the volume itself or from a good photocopy of the original article.

When it comes to journal articles, we are interested not only in the page numbers of the item, but also the volume number of the journal in which it appears. In some instances we need the number of the issue as well, because not all journals number their pages consecutively from issue to issue, but begin each issue with page one.

10.0 FORMAT

The format of a bibliography or of a list of references is flexible. Some scholars prefer to use only roman type and dispense entirely with quotation marks, parentheses and brackets. In the S.I.L. Bibliography I have opted to use all of these because I think they

help the reader to see more readily what kind of item is identified by the entry. The examples of bibliography entries are taken from the published editions of the *Bibliography of the Summer Institute of Linguistics* [Wares, 1979, 1985] and are shown in the format as we expect them to appear in the forthcoming (1992) edition of the complete Bibliography.

Analyzed collections will be listed first in the Bibliography, in alphabetical order by author and chronologically under the author's name. An "Analyzed Collection" refers to a collection of articles, all of which are listed separately elsewhere in the Bibliography. The name in the author slot is followed by "ed." or "comp." and the title of the work appears in italics.

Brend, Ruth M., ed. 1974. *Advances in tagmemics.* [North-Holland Linguistic Series 9, S.C. Dik and J.G. Kooij, eds.] Amsterdam: North-Holland, xiii, 458 pp.

Following this section will be the technical section of the bibliography, listed alphabetically by author and chronologically under each author separately. I realize that in some ways it would be helpful to list all works of the same general kind together in one section, but in the interest of saving space we will leave that to be taken care of by the subject index. The following applies generally to the technical section of the S.I.L. Bibliography.

The name of the author will appear first in the entry, in roman type. No distinction will be made in this edition between authors who are members of S.I.L. and those who are not. In the printed volume, a three-em dash will be used to indicate the same authorship as the previous entry.

The name of the author(s) will be followed by a period unless he (or she) is designated as editor, compiler, or translator, in which case it will be followed by a comma and the abbreviation of the appropriate designation (ed., comp., or tr.).

In the forthcoming edition of the S.I.L. Bibliography I have placed the date of the publication as the second item in the entry, not in parentheses as formerly, and followed by a period. The only exception to this will be to enclose in brackets the date of publication when it does not appear on the publication itself but has been supplied by the compiler. As with previous editions of the

bibliography, entries will be listed in order by date, but within a given year they will be alphabetical by title.

The title of an article, thesis, or dissertation will be given within double quotation marks, as recommended in *The Chicago Manual of Style* [The University of Chicago Press, 1982]. The S.I.L. Bibliography does not include unpublished papers read at a symposium, but if you include these in a list of references they should appear in this same format. If you prefer to follow a different format, that is your privilege, but please be consistent.

Pike, Kenneth L. 1960. "Toward a theory of change and bilingualism." *Studies in Linguistics* 15:1–7.

Wares, Iris M. 1965. "Linguistic and related problems in Mexican Indian literacy." [M.A. thesis, University of Texas] Austin, v, 144 ll.

Wares, Alan C. 1965. "A comparative study of Yuman consonantism." [Ph.D. dissertation, University of Texas] Austin, v, 193 ll.

(In the above examples, note the use of "ll." to stand for "leaves" instead of "pages".)

A journal article that is a review of a book will not be placed within quotation marks, but rather begin in roman type with "Review of" followed by the title of the work in italics, comma, and the author's name in roman type. If the item reviewed is an article (often in the same journal), the words "Comment on" are used instead of "Review of" and the title of the article given within double quotation marks.

Merrifield, William R. 1970. Review of *Tribal and peasant economies: readings in economic anthropology*, ed. by George Dalton. Practical Anthropology 17:181–82.

Gudschinsky, Sarah C. 1960. Comment on "Lexicostatistics so far," by D.H. Hymes. *Current Anthropology* 1:39–40.

Titles of monographs and volumes of collected papers will be given in italics in the S.I.L. Bibliography. This will help the reader distinguish between the title of a volume and the title of a series in which the volume appears.

Titles of vernacular publications appear in italic type, as they are monographs. An abbreviation of the kind of publication is given in square brackets, and if the name of the author does not appear on the title page or elsewhere in the publication, it also is given in square brackets.

[Stanford, Ron] and [Lyn Stanford]. 1973. *Be buo ashan 1–4.* [prm] Zaria: Institute of Linguistics, 4 booklets (36, 48, 44, 60 pp.).

[Warkentin, Milton] and [Clara Warkentin]. 1961. *Arej cuenta micuenta nimal (Tres cuentos de animales).* [rdr] Mexico: Instituto Linguistico deVerano, 15 pp.

For a volume that is part of a series, the title of the series will follow the title of the volume. The series title will be in roman type, followed by its number in the series, a comma, the name of the series editor, a comma, and "ed."; and all of this will be enclosed in square brackets. If the editor's name is not known, it will be omitted.

Story, Gillian L. 1984. *Babine & Carrier phonology: A historically oriented study.* [SIL Publications in Linguistics 70] Dallas: Summer Institute of Linguistics and University of Texas at Arlington, x, 110 pp.

For an article in a volume, the title of the volume will follow the article title. The volume title will be in italics, followed by a comma and "ed. by" and the author's name in roman type. If the volume is part of a series, a colon will be placed after the editor's name, followed by the series information as specified above. All of this will be placed within square brackets.

Harms, Phillip L. 1985. "Epena Pedee (Saija): Nasalization." [*From phonology to discourse: studies in six Colombian languages*, ed. by Ruth M.Brend: Language Data, Amerindian Series 9] Dallas: Summer Institute of Linguistics, pp. 13–18.

Following the title of a journal article, the name of the journal (or its commonly used abbreviation) will be given in italics, followed by the volume number, a colon, and pagination, in roman type. If it is necessary to specify the issue of the journal, that will be placed in parentheses following the volume number; e.g., *Read* 12(2):33–45.

Reviews or abstracts of works by S.I.L. authors will be noted at the end of the bibliographical entry. Reviews will be introduced by "Rev.:" and followed by the surname of the reviewer in roman type, a comma, the journal name (in italics), and the pagination in the usual form and the year in parentheses. Abstracts will be indicated by "Abs." followed by the journal name and pagination or number of the abstract.

REFERENCES

The University of Chicago Press. 1982. The Chicago manual of style, 13th ed. Chicago: The University of Chicago Press.

Wares, Alan C. 1979. Bibliography of the Summer Institute of Linguistics, volume one: 1935–1975. [Dallas]: Summer Institute of Linguistics.

——. 1985. Bibliography of the Summer Institute of Linguistics, volume two: 1976–1982. [Dallas]: Summer Institute of Linguistics. ■

Twentieth Annual Linguistics Symposium

University of Wisconsin–Milwaukee
April 12–14, 1991

Topic: Word Order in Discourse

Invited Speakers:

Barbara Fox – University of Colorado
Robert Longacre – University of Texas at Arlington
Marianne Mithun – University of California at Santa Barbara
Others to be announced

Papers will be given concerning the question of how and to what degree differences in constituent order are affected by discourse structure, i.e. by the functions of clauses and their constituents in discourse.

For more information, contact:

Michael Noonan
Department of English
University of Wisconsin
Milwaukee, WI 53201

■

221

Researching Quote Styles

URSULA WIESEMANN

Quotes are touchy things to handle, particularly in translation. For example, many Amerindian languages have (practically) only direct quote style, so all indirect quotes have to be transposed. Many words of feeling and believing are translated as direct quotes as well. In many African languages, on the other hand, we find a complexity of quote styles, and their transference from a non–African language is even trickier. We still don't know a lot about the function of these forms, though we've got a pretty good idea of what the forms consist of – except for the surprises still in store. Here are some pointers that I have found useful in researching them.

Translation of quotes can be a touchy thing to handle.

1. Types of Quotes

As far as I can make out it is best to distinguish (at least) five types of quotes:

a) **direct quote**: *'John said to Mary: "I'll come to see you"* ' – the quote is repeated the way it was (presumably) said by the speaker;

b) **indirect quote**: *'John said to Mary (that) he would come to see her'* – the indirect quote is preceded by an optional 'that' and characterized by certain changes of pronoun and verb form, as compared to the direct style;

c) **semi–direct quote**: *'John said to Mary that he (John) would come to see you (Mary)'* – this is not said to Mary by the one quoting John but rather said by me (Ulla) to you (who is reading this) about John and Mary. This quote style does not exist in English or any European language I know. In African languages where it does exist it is indicated by pronominal usage;

d) **quasi–direct quote**: *'He begged her to believe him when he said he could not earn. Had he not already sunk a small fortune in attempts to do so?'* (S. Beckett. 1963. Murphy. Quoted in Coulmas, 1986:8) – the thoughts of the quoted speaker are reported without overtly indicating that it is a quote. In the example above, this style is found in the **question**, which is very similar in structure to a direct quote but has third person reference for the speaker. This style is often used in French (commonly called 'style indirect libre') but also in English and German;

e) **implied quote**: *'John promised Mary to come'* – where 'to come' does not show any sign of being a quote, being completely integrated into the report. This is very common and usually treated as indirect quote style in the European grammars. In African languages, on the other hand, it is almost non-existent!

Different quote styles commonly occur mixed in the same quotations. The above excerpt from Beckett shows an implied quote: *'He begged her to believe him'*, which becomes indirect: *'he said he could not earn'*, and then becomes quasi–direct in the following question. This mixing of styles is found in African languages as well!

2. Quote introducing verbs

In most languages the verbs of **saying**, **thinking** and **feeling** are a distinct subclass within the class of verbs. Not all of them can necessarily be used to introduce every quote style which the language has. Or, it may be that using the same **saying** verb to introduce different quote styles, causes that verb to have a different meaning. For example, the difference could be between a spoken quote and a quote which is (presumably) thought but not actually pronounced.

3. Quote introducing particles

A language might have a series of quote introducing particles like *'that'*, *'whether'*, or *'how'*. These can be diagnostic of a particular quote style (in English of indirect rather than direct quotes), or they may be used with all quote styles (in Greek and many African languages).

4. Participant reference

In all cases, the type of pronoun reference distinguishes the quote styles. In the direct style, the quoted speaker is always referred to in the first person, the addressee in the second person, those spoken about in third – reference is exactly like in ordinary narrative. In indirect and quasi–direct quotes, the quoted speaker as well as the addressee of the quote are referred to in the third person.

A special situation arises, when there is identity overlap between the participants of the actual and of the quoted speech act, as in: '*I told you that you should go – I told him that I would go – you told me that you would go – you told him that you would go*' over against '*he told him that he would go.*'

Many African languages have a special pronoun to indicate that one of the participants in the quote is identical with the quoted speaker. This is commonly referred to as the logophoric pronoun and is used in such situations as: '*X told Y that X would go*' over against '*X told Y that Y (or Z) would/should go*' (see Hyman and Comrie 1981, and Wiesemann 1984 and 1986).

In the case of semi–direct quotes, the quoted speaker is referred to in the third person (or by logophoric pronoun) whereas the original addressee is referred in the second person. But in at least one language, this situation can be reversed: in answering a semi–direct quote in a dialogue, the original speaker can be referred to in the first person and the original addressee in the third person. This gives dialogues such as a beggar asking a potential giver: '*he (I) would eat if you gave him (me) something*'; and the potential giver responding: '*I would give him (you) if I had anything*' (cited by Gakinabay, 1986). It is possible that such quotes are actually direct quotes using a special style of speaking in which the speaker refers to himself (or his addressee) in the third person.

In implied quotes the agent would most likely be referred to by a possessive form or by an infinitive construction, but not by a subject pronoun. Examples are: 'he promised his speedy return – he promised to return soon'; 'he ordered her immediate departure – he ordered her to go immediately'.

5. Time, location, direction reference

In many languages the verb forms are different in direct and non-direct quote styles. In English, for example, the tense of the verb in the quote content must concord with that of the speech introducing verb if the indirect style is used; this restriction is not found in the direct style. There may be other verb form changes. In African languages the verb forms remain the same in both direct and non-direct quotes. A close examination of the use of time adverbs (and the possible concordance rules for them) might yield some formal differences between the various styles. The same goes for the indicators of direction and location. The use of demonstratives might be indicative of style. The following example is cited in Coulmas [1986]: *'John told Paul, "Come* **here** *and take care of* **this** *mess!" ' – 'John told Paul to go* **there** *and take care of* **that** *mess.'*

6. Hearsay information

Another aspect to study is what strategies are available for 'hearsay information'. Does the language have a 'hearsay' particle? Where can it occur? Does it have any relationship to the quote styles?

7. Exclamation words and Vocatives

Exclamation words and vocatives are widely used in conversation and found in direct quotes:

"Bother, it didn't work out right!", he exclaimed.

"Bill, would you help me?", she pleaded.

According to Noss (1988) both can also be found in indirect speech in Gbaya, denoting the same kind of immediacy associated with direct speech.

8. The Function of the different styles

It is commonly held that the difference between direct and indirect quotes has to do with the prominence given to the original speaker over against the narrator. The more that the quote is integrated into the report, the less prominence is accorded to the original speaker who thus becomes backgrounded. The difficulty lies in trying to

determine exactly what this means in an African language, when, for example, the indirect style is used for normal reporting and the direct style for very special proposes only. Exactly what are the purposes for which these are used? What is the relationship between the style used, the importance of the speaker quoted, and the climactic structure of the text? See Glock (1986) and Gakinabay (1986) and Noss (1988) for some new insightful suggestions on these questions. Noss shows how the different styles may be cleverly woven together, switching from one to another within sentences or even clauses as the narrative develops.

We are faced with an important question: At what point should a style be changed in the translation process in order to maintain the same level of prominence intended in the original? Chia (1986) has some ideas on this subject.

REFERENCES

Chia, E. N. 1986. Indirect quote as the dominant style of reporting in Kom. Language in global perspective, ed. by B.F. Elson, 149–161. Dallas: Summer Institute of Linguistics.

Coulmas, F., ed. 1986. Direct and indirect speech. Amsterdam: Mouton de Gruyter.

Gakinabay, M. and U. Wiesemann. 1986. Les styles de discourse en sar et leur mode d'emploi. Journal of West African Languages XVI, 2. 39–48.

Glock, Naomi. 1986. The use of reported speech in Saramaccan discourse. Pragmatics in non-western perspective, ed. by G. Huttar and D. Gregerson. Arlington, TX: Summer Institute of Linguistics and University of Texas at Arlington.

Hedinger, Robert. 1984. Reported speech in Akoosa. Journal of West African Languages and Linguistics XIV, 1. 81–101.

Hyman, L. M. and B. Comrie. 1981. 'Logophoric reference in Gokana.' Journal of African Languages and Linguistics 3, 1. 19–38.

Noss, Philip A. 1988. Speech, structure and aesthetics in a Gbaya tale. Journal of West African Languages XVIII, 1. 97–115

Wiesemann, U. 1984. How should Jesus be quoted?. Notes on Translation 101. 27–39.

——. 1986. Grammaticalized Coreference. Pronominal Systems, ed. by U. Wiesemann. Tübingen: Gunter Narr Verlag.

Editors' Note: Look for an expanded and more technical article on this subject by Wiesemann in an upcoming (1990 or 1991) issue of Journal of West African Languages. ■

232

1990 Relational Grammar Bibliography Update

from STEVE MARLETT

Books, Dissertations, and Theses:

Blake, Barry J. 1990. Relational grammar. (Croom Helm Linguistic Theory Guides Series.) London and New York: Routledge.

> A general overview of the theory, fairly clear and up-to-date. It does not go into great depth on any one topic. List price: $20.

Constable, Peter. 1989. Basic clause structure in Veracruz Huastec. Master's thesis, University of North Dakota.

Dubinsky, Stanley. 1989. The syntax of complex predicates in Japanese. Studies in natural language and linguistic theory. Dordrecht: D. Reidel. (Revision of 1985 Cornell dissertation.)

Legendre, Geraldine. 1987. Topics in French syntax. Ph.D. dissertation, University of California, San Diego.

Postal, Paul. 1989. Masked inversion in French. Chicago: University of Chicago Press.

> Postal argues that certain embedded clauses in French are Inversion clauses, even though the inversion is "masked" in the surface structure -- the clauses look no different than simple transitives. The evidence for the inversion is based primarily on the exceptionality of these clauses to obey a general constraint on pronouns in French.

Whaley, Lindsay. 1990. On genitive absolutes in Koine Greek. Master's thesis, State University of New York, Buffalo.

Articles:

Breen, Walter. 1988. Grammatical linking in multiple object languages. ESCOL '88. 47-58.

Breen, Walter. 1988. Grammatical relations, thematic roles and control in inversion predicates. CLS 24.

Constable, Peter G. 1989. Reflexives in Veracruz Huastec. Workpapers of the Summer Institute of Linguistics, University of North Dakota 33. 31-65.

Davies, William D. 1988. The case against functional control. Lingua 76. 1-20.

Davies, William D. and Carol Rosen. Unions as multi-predicate clauses. Language 64. 52-88.

Dubinsky, Stanley. 1989. Compound *suru* verbs and evidence for unaccusativity in Japanese. CLS 25. 98-111.

Dubinsky, Stanley, María-Rosa Lloret, Paul Newman. 1988. Lexical and syntactic causatives in Oromo. Language 64. 485–500.

Durie, Mark. 1988. The so-called passive of Acehnese [sic]. Language 64. 104–13.

This article shows that the analysis which Perlmutter relied on for his argument about verb agreement in this language (referring to initial 1-hood) is probably not a defensible one. The original analysis by Lawler was based on little contact with the language and a generally poor understanding of how it worked.

Gerdts, Donna B. 1987. Surface case and grammatical relations in Korean: The evidence from quantifier float. Studies in Language 11. 181–97.

Gerdts, Donna B. 1988. Semantic linking and the relational structure of desideratives. Linguistics 26. 843–72.

Gerdts, Donna B. 1989. Relational parameters of reflexives: The Halkomelem evidence. Theoretical perspectives on Native American languages, ed. by Donna B. Gerdts and Karin Michelson. Albany: SUNY Press.

Gerdts, Donna B. and Cheong Youn. 1989. Non-nominative subjects in Korean. Papers from the Harvard Workshop on Korean Linguistics.

Legendre, Geraldine. 1988. On the issue of multiple syntactic levels: Evidence from French control. Proceedings of the 1988 Eastern States Conference on Linguistics.

Legendre, Geraldine. 1988. On the issue of multiple syntactic levels: Evidence from French control. ESCOL '88. 301–12.

Legendre, Geraldine. 1989. Inversion with certain French experiencer verbs. Language 65. 752–82.

Legendre, Geraldine. 1989. Unaccusativity in French. Lingua 79. 95–164.

Legendre, Geraldine. 1990. French impersonal constructions. Natural Language and Linguistic Theory 8. 81–128.

Marlett, Stephen A. (in press) Person and number inflection in Seri. IJAL.

Deals briefly with all clause constructions in Seri.

Perlmutter, David M. 1989. Multiattachment and the unaccusative hypothesis: The perfect auxiliary in Italian. Probus 1. 63–119.

Perlmutter, David M. (to appear) Demotions to object, the successor demotion ban, and the class of careers.

Perlmutter, David M. and Richard A. Rhodes. (to appear) Thematic-syntactic alignments in Ojibwa: Evidence for subject-object reversal.

Postal, Paul M. 1988. Phantom successors and the French *faire par* construction. Submitted for The joy of grammar: A festschrift for James D. McCawley, ed. by D. Brentari, G. Larson, and L. MacLeod.

Postal, Paul M. and Geoffrey K. Pullum. 1988. Expletive noun phrases in subcategorized positions. Linguistic Inquiry 19. 635–70.

> This article mainly argues from English against the Government/Binding claim, based on the Projection Principle, that dummy elements cannot occur in positions other than subject position. As a result, the major theoretical objection to subject-to-object raising analyses in that framework is undermined.

Rosen, Carol and Kashi Wali. 1989. Twin passives, inversion and multistratalism in Marathi. Natural Language and Linguistic Theory 7. 1–50.

Rosen, Carol. (to appear) Rethinking southern Tiwa: The geometry of a triple agreement language.

Rosen, Carol. (to appear) Italian evidence for multi-predicate clauses.

Tsujimura, Natsuko. 1989. Unaccusativity mismatches in Japanese. ESCOL '89. 246–76.

Some presentations from the Grammatical Relations Conference, San Diego 1990 (may appear in a proceedings volume):

Cresti, Diana. A unified view of psych-verbs in Italian.

Davies, William D. Javanese evidence for subject-to-object raising.

Dubinsky, Stanley. Light verbs and predicate demotion in Japanese.

Dziwirek, Katarzyna. Default agreement in Polish.

Gerdts, Donna. Relational visibility.

Hong, Ki-Sun. Subject-to-object raising in Korean.

Legendre, Geraldine. French causatives: Another look at *faire par*.

Mejias-Bikandi, Errapel. Clause union and case marking in Basque.

Mirto, Ignazio. Nouns as auxiliated predicates.

Moore, John. Spanish clause reduction with downstairs cliticization.

Perlmutter, David M. Relational grammar without strata.

Postal, Paul M. 'Passive' restrictions in nonpassive constructions.

Rhodes, Richard A. Ojibwa 3's.

Rosen, Carol. Large clauses: Auxiliation versus serialization in unions.

Sells, Peter. Is there subject-to-object raising in Japanese?

Whaley, Lindsay. The effect of non-surface grammatical relations on the genitive absolute in Koine Greek. ■

Reports on the VIII LAILA Symposium and The XII *Taller Maya*

WESLEY M. COLLINS

SIL/Guatemala

The VIII LAILA Symposium

The VIII LAILA (Latin America Indigenous Literature Association) Symposium was sponsored by the University of Costa Rica in San Jose, June 10–17, 1990. It was attended by approximately 60 people from Argentina, Bolivia, Canary Islands, Chile, Colombia, Costa Rica, Ecuador, El Salvador, England, Guatemala, Holland, Mexico, Peru, and the United States.

The Symposium week was divided into ten sessions, each session dealing with a different broad topic and containing from three to five related presentations. Of the 42 papers that were presented, ten were in English; the rest in Spanish.

Eleven of the papers were analyses of indigenist literature, that written **about** but not usually **by** Indians. Another thirteen dealt with Indigenous American mythology and Mayan glyphs. There was one paper by an astronomer who has worked to corroborate present–day astronomical observation and computer models of the sky, with the ancient Mayans' magnificent understanding of the interrelationships among the sun, the earth, the moon, Venus and Mars.

I attended the Symposium with Eberardo Feliciano, a Mayan co–worker, teacher, and university student. He was the only native American to present a paper. He listed about twenty proverbs that Maya–Mam parents tell their children while they are growing up and he explained the cultural value that the proverb was intended to teach. Then he showed how certain values are taught to children at different ages, i.e., infancy, youth, adolescence. His composure and style were outstanding.

My presentation followed Eberardo's. It was a comparison of two similar tales, one in Maya–Mam and one in Spanish, to show similarities and differences in how the authors use specific linguistic "tools" to mark theme, background, tension, climax, the moral of the story, etc. Both papers seemed to be very well received.

There were no other SIL people at the Symposium, unfortunately. I believe that we have much to offer as far as present day village reality which either may or may not support the theories of indigenist (as opposed to indigenous) historians and writers. The contacts and opportunities for friendship and ministry were myriad. Many have heard about SIL during their entire professional careers, but not many know our people personally.

I urge that we take future opportunities to attend such conferences and that we invite native Americans to accompany us. The Symposium gave Eberardo a real opportunity to see how the "professional world" turns, it buoyed his confidence, helping him see that he had a lot to offer, and it helped keep the rest of us "honest", not trying to pass stuff off as legitimate Mayan thought, when we had someone there who really knows what goes on inside a Mayan's head.

The next LAILA Symposium will be held in Quito from June 4–11, 1991. The 1992 Symposium is scheduled for San Juan, Puerto Rico.

For further details, write:

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The XII *Taller Maya*

The *Taller* (Workshop) *Maya* was held in Cobán, Guatemala from June 25–29, 1990. There were about 120 in attendance, including about 100 of whom were mother–tongue Mayan speakers.

The quality of the presentations given by Mayans was as a rule, outstanding. Most of these talks were concise, well backed with

examples, and conceptually simple. In other words, they didn't try to do too much. They stuck to a single point and made it well. There were papers researched and presented by Mayans on word order, ergativity, classifiers, written standardization of closely related dialects, second language learning, and the revitalization of minority languages. Of the 28 presentations, only five were by non-Mayans, including one by SIL.

Over the years, the *Taller Maya* has evolved from a meeting of non-Mayans who got together to talk about Mayan linguistics to a meeting of Mayan professionals, with "outsiders" in the clear minority, both numerically and often philosophically. Mayans are in the midst of a cultural renaissance after years of feeling culturally, economically, linguistically, socially, and politically oppressed. It's an exciting time to work with Mayan people, but we need to realize that we as outsiders are not always perceived by all Mayans as "part of the solution."

With that reality in mind, it's extremely important that we keep the doors of communication open, not just to the Mayans in the hinterlands where we work, but also to the Mayan professionals in the big cities and universities, some of whom have graduate degrees in linguistics, anthropology, sociology, theology – and who don't always agree with our view of Mayan reality.

One of the ways for us to keep in touch is by attending conferences like the *Taller Maya*, where linguistics is put into a political, economic and social context. We've got to strive to understand, respect and love these Mayan leaders even though they may have outlooks very different from our own. Also, we need to work with our Mayan colleagues to help them develop the aplomb and the understanding of larger issues that involve them and warrant response. The time has quickly passed when we can claim to speak for Indians. We are foreigners. There is a growing group of articulate and well-educated Mayans who also claim to speak in the best interests of Mayan Indians. Who is a government to believe?

Life is complex. But the solution is not to avoid difficulty and pretend that everything is fine. The XIII *Taller Maya* will be held next June in Rabinal, Guatemala. ■

Report on the 1990 Georgetown University Roundtable on Languages and Linguistics

from CAROL ORWIG

Some Major themes addressed in the conference were: the need for a theory of Language Teaching; bilingualism; how we internalize a language; comprehension; and learning styles and strategies.

Opening Session : Sir John Lyons

Whereas most of the conference centered on language teaching and second language acquisition research; Lyons discussed theory, practice, and research as they relate to linguistics proper. One of his main points was to distinguish between linguistic theory and theoretical linguistics. The former, he says, is the older, weaker sense of theory, which is speculative and contemplative. The latter is the newer, stronger type of theory; a mathematical system which can be proven empirically and formalized. Lyons calls this "theoretization".

Although linguists since Chomsky have tended to devote themselves to the newer type of theory, Lyons believes that the older theory still has a part to play, particularly in exercising a degree of control on theoretization.

A. The Need for a Theory of Language Teaching

1. H.G. Widdowson. Discourses of inquiry and conditions of relevance.

Linguistics, language teaching, and Second Language Acquisition (SLA) research are each separate realms of inquiry. Each carries its own presuppositions about what kinds of activities are relevant and allowable. For example: the development of communicative competence is a basic goal for language teachers, with grammatical competence playing a supporting role; whereas for Chomsky and his followers, grammatical competence is primary.

SLA research has for the most part followed the presuppositions of the linguists; for instance, it studies how and in what order grammar is acquired. Thus SLA and linguistics have the same cognitive environment, while language teaching has a different one. The conclusion is that ideas from SLA and linguistics can be made relevant to pedagogy, but teachers must not abandon their own presuppositions and goals.

2. Diane Larson–Freeman. On the need for a theory of language teaching.

The field of language teaching finds itself without a guiding theory or looks to linguistics or psychology for its theories. SLA research usually studies natural language acquisition rather than classroom learning. This leads to the fallacy that the classroom setting should match the natural setting as closely as possible.

We need a separate theory of language teaching because Second Language Teaching has a different goal from SLA. SLA studies what is minimally necessary for learning to occur. Second Language Teaching should study the teaching–learning process to make it more effective. A teacher should try to provide an experience harmonious with natural SLA, but which accelerates it.

A theory of SLT should be grounded in classroom data, allow for teacher growth, and motivate research of what a teacher does and thinks.

B. Bilingualism

Richard Tucker. Cognitive and social correlates and consequences of additive bilingualism.

Those who advocate ENGLISH ONLY legislation in the USA ignore or don't understand research on bilinguality. In the early 1960s, Elizabeth Peal and Wallace Lambert, taking as their sample all 10–year–olds in Montreal, found (to their surprise) that bilinguals had advantages as compared with their monolingual counterparts. Bilinguals were more creative, had more cognitive flexibility, and

scored higher on tests of verbal and non–verbal IQ. Other studies over the years have born these findings out.

By the year 2020, it is projected that 45% of the American student population will be non–English speakers. These students obviously need to become bilingual. On the other hand, we also need more effective foreign language programs for our English–speaking students. Present foreign language classes do not allow the average student a chance to achieve bilinguality.

Additive bilingual programs offer a way to help both groups achieve proficiency in a second language. These include both language majority and language minority students and offer instruction in both languages to both groups of students.

Bilingual programs may have a positive effect on social development as well as cognitive development, but in order to be effective these should last 5–7 years.

C. How We Internalize a Language

1. Wilga Rivers. Mental representations and language in action.

Representation is at the heart of the internalization of language. Language teachers should be wary of accepting the idea that the basic mental representation of language is linguistic; grammatical appropriateness in itself is not sufficient. Recent studies by cognitive psychologists have shown that memory processes link knowledge to action, that memory is a relational network of interconnected nodes, or concepts. Items of knowledge and memory traces are distributed **throughout** the system. Researchers call this process "distributed parallel processing". When a person remembers, accesses information that has been stored, it is evoked by various stimuli, rather than being "found". This research casts doubt on a non–permeable division between what is acquired and what is learned.

For language pedagogy, this means that accessibility is key to learning. Students must be given continual opportunities to reactivate what they have learned. The studies show the importance of learning in context and using every possible meaning and modality to reinforce

language. Memories are strengthened by use, and remain available through a series of contextual triggers. Thus, students should use whatever they know and not just what they are learning at the time. Since we combine knowledge and action through performing rules, even routine drills can become effective in contexts which support them.

2. John Oller. Semiotic theory and L2 practice.

The necessary and sufficient conditions for learning a language are comprehensible input and pragmatic connection. C.S. Pierce's term "abduction" is relevant here. Abduction is equilibrating the representation and the facts; or making sense of the representation. It might also be called "naming something". Abduction partakes of the miraculous by ruling out an infinity of alternative possibilities. It is how people learn languages.

Connections between representations in one form, such as linguistic, and those in another, such as kinesic, are very strong. Language learning involves relating them to each other as well as to the facts.

D. Comprehension

1. Elizabeth Bernhardt. Knowledge-based Inferencing in Second-language Comprehension.

Comprehension is based on two sources of information: specific linguistic information together with knowledge about the topic being discussed and the world in general. The process of comprehending involves "inferencing", or associating the linguistic information with concepts.

Current second-language acquisition theories mention the importance of knowledge in comprehension, but do not define it in a rigorous way or bring data to bear. Researchers must contend with the KNOWLEDGE variable in their research.

In the classroom, a one-time performance on one topic is insufficient to indicate proficiency, as students bring different knowledge bases to bear. Language teachers should prepare students to inference from

what they know. Authors of language-teaching methods should start from the knowledge base of individual students.

In summary, an understanding of how second language comprehenders acquire, store, and use culturally appropriate knowledge is of central concern to second language theory, research, and instruction.

2. Joan Rubin. Improving foreign language listening comprehension.

An experiment was done which trained high school students of Spanish to use certain listening strategies while watching short video segments. An effort was made to provide a rich context which learners could experience and connect with speech.

Three kinds of listening strategies were employed and found to be effective:

1. Prediction, or generating hypotheses (top down processing).
2. Verification, or checking the hypotheses.
3. Cognate hypothesis, or using context to verify hypotheses about the meanings of cognate words (bottom up processing).

3. Tracy D. Terrell. Natural vs. classroom input: Advantages and disadvantages for beginning language students.

It has been hypothesized that, when a foreigner is trying to acquire a second language in a natural setting, speakers of the target language will modify their speech in ways that will aid the learner's comprehension. These modifications have been compared to those which people make for children trying to learn their first language. Such modifications are presumed to be the natural outcome of the negotiation of communication.

Research on a young man trying to learn Spanish exclusively from interaction with Spanish-speakers, indicates that foreigner talk is not always easily understood by the language learner and does not always aid acquisition. It is not the same as caretaker talk (for children) or teacher talk, which aims at giving the learner lots of comprehensible input.

Many hours of recorded interactions showed that untrained interlocutors often couldn't modify their speech to the foreign learner's level. They seldom highlighted key words or volunteered repetitions. When they did repeat, the repetitions were often more complicated than the original statement.

The conclusion is that the casual conversation may not provide good input for language acquisition, whereas a work or task situation may provide better input. Also, it seems that making friends with native speakers, who get used to the learner and want to communicate with him or her, will provide better input.

E. Learning styles and strategies

1. Madeline Ehrman. Owls and doves: Cognition, personality and learning success.

Many individual variables apart from "language aptitude" play a role in successful language learning. One of the less-understood of these is the variable of individual personality factors. This paper discusses two types of learners who differ on one dimension of the Myers-Briggs Type Indicator scale: thinking and feeling.

Thinking (Owls): Analysis is their most salient thinking style. They make extensive use of grammar, content, and the program. They maintain detachment from others and from stressful interpersonal events. The kind of learning situation that thinkers find congenial is business-like, shows order and organization in the syllabus, and has task-related harmony. Some possible liabilities of Owls are that their detachment could lead them to become careless of the feelings of others and that their control needs could lead to controlling behavior.

Feeling – (Doves): It is very important to doves to maintain harmonious relationships with teachers and classmates. There is an interest in teachers as people and in the culture and people of the target language country. In learning situations, they need for teachers to be accessible and to take interest in learners. Some possible liabilities of Doves are that they can become overdependent on external harmony. They may feel neglected when teacher attention is drawn to others. They may reject analytic strategies.

2. Rebecca L. Oxford. Missing Link: Evidence from research on language learning styles and strategies.

Learning style refers to the way people prefer to process information. It is a habitual approach to learning and includes attitudes and interests. A learning strategy is a specific behavior or action used by the student to enhance the acquisition, storage, retention, recall, and use of new information.

There is a linkage between the two: people with certain learning styles tend to choose certain strategies. Here are some examples:

Style	Strategies and traits
Global Gary	Guessing, conversing without knowing all of the words, searching for the main idea, being sensitive to the socio-emotional context.
Analytic Anne	Dissecting words and sentences, thinking, contrastive analysis, avoids social and emotional subtleties, discrimination exercises, focus on grammar rules.
Intuitive Irene	Formal model building, random access, non-sequential, big picture.
Sensing Susan	Sequential learner, step-by-step, linear, multimedia, memory strategies.
Closure-Oriented Claudia	Hard-working, hates ambiguity, wants closure now, organizing.
Open Oliver	Learning is a game, open. Deadlines? What, me worry?

There are three potentially central style dimensions: analytic vs. global; tolerance vs. intolerance for ambiguity; and sensory preferences (visual, auditory, tactile, kinesthetic, or combinations).

Although learners typically select strategies according to their style, they can be taught to use strategies outside of their "stylistic comfort zone".

While all learners use strategies, those of successful language learners are varied and plentiful; those of average and unsuccessful learners are sometimes inappropriate. Strategy training has positive effects in terms of improving certain language skills. The affective component

needs to be built into strategy training, along with the cog[illegible]ve and metacognitive.

3. Anna Uhl Chamot. Cognitive instruction in the second language classroom.

By better understanding how students learn, we can teach more effectively. One aspect of this is the personal characteristics which students bring to the task. Some of these are:

a. **Motivation** dominates the student's ability to profit from learning strategies. Teachers can include motivational components.

b. **Aptitude** is a strategic ability that can be learned more than it is an innate trait.

c. **Learning style** is a predisposition to choose certain strategies. Some strategies are so useful for academic tasks that they should be learned.

d. **Age and cultural background** affect a person's stategies.

Some generalizations about teaching learning strategies to students:

a. Such instruction should be integrated with the curriculum rather than taught as a separate course.

b. Students should be told when they are learning a strategy and what it is good for.

c. Teachers should show students how to use strategies by modelling them.

d. Ineffective learners should get priority for strategy training.

F. Miscellaneous

1. H. Douglas Brown. M&Ms for language classrooms: Another look at motivation.

Teachers have talked much about motivation, but often without reference to its deepest roots. By shifting our focus from students extrinsic motives to their intrinsic motives of personal confidence and self–determination, we may dramatically increase success.

Four ways in which teaching can be empowered and empowering are:

1. Using learner-centered techniques.
2. Teaching learners how to learn so they may gain a measure of control over themselves.
3. Making tests more intrinsically motivational by creating tests that simulate real-world tasks.
4. Tying pedagogy to broader social goals and teachers seeing themselves as agents of change with a mission to accomplish.

2. Stephen Krashen. How reading and writing make you smarter or how smart people read and write.

In our heads we have an Idea Generator, which takes old ideas and gives us new ideas. It works involuntarily. There are five stages:

1. Gathering old ideas by listening and reading.
2. Preparing old ideas by telling them to someone or writing them down.
3. Incubation.
4. Illumination – the Eureka stage in which the new idea comes out.
5. Verification.

We must consider whether we learn things by studying or whether we learn things by problem solving. Research shows that implicit learning can be better than explicit learning and incidental learning better than intentional learning.

Smart people use reading and writing to solve problems. In school you learn, "all reading is core, not peripheral. Try to remember what you are reading while you read." Eminent people, on the other hand, read a lot, but they read selectively; they read what is needed to solve the problem they are working on.

Writing is the best way to prepare ideas for the idea generator. Revision can be creative. You should start to write early; the more research you do the more impossible it is to start writing. Write down your fringe thoughts; ideas grow tentacles toward each other.

Conclusion: Schools need to find enterprises, real problems which people want to solve and which involve reading and writing. ■

Report on the International Pragmatics Conference

held in Barcelona, July 9–13, 1990

by INGE EGNER

This was the second conference of its kind (after the one in Antwerpen in 1987) organized by the International Pragmatics Association (IPrA). The city and university of Barcelona were a fascinating venue for this important event: playful and original Gaudi architecture, Picasso and Miró museums, life-size model of Christopher Columbus' ship in the maritime museum. Also there is a real building and embellishment frenzy going on in town and on the hillsite of the Olympic village to get ready for the Olympic games in 1992, for which some 300,000 people are expected! So much for setting the context, since this was a pragmatics conference...

The theme of the conference was "The Interdependence of Social and Cognitive Aspects of Language Use". Some 200 presentations were on the program, which meant up to six parallel sessions! Moreover, about the same number of poster sessions were held altogether on three of the five conference days. A very wide range of topics were treated, including classical speech-act theory (SA verbs, indirect SAs, etc.), politeness strategies and Grice's maxims, pragmatic analysis of particles (especially Japanese ones it seemed, among them the well-known and inevitable particle *wa*), of reported speech, of cleft constructions, of deixis and of neologisms, plus pragmatic aspects of language acquisition and communication disorders.

Unfortunately, an organizational flaw messed up the schedule quite a bit: there was no transition time between sessions! In other words, if you wanted to change rooms, there was just no way of getting there on time.

Three of the plenary talks were cognitively oriented: Len Talmy from Berkeley talked about "Fictive Motion in Language and Perception" (things like *Were did my purse go?*). Dan Slobin, also from Berkeley, argued that "in acquiring a native language, the child learns particular ways of thinking for speaking". Deirdre Wilson from the

University College of London showed the relevance of the "principle of relevance" by giving language uses such as metaphor, irony, loose talk, and free indirect speech as evidence against a maxim of truthfulness. The "social" linguists among the plenary speakers were represented by John Gumperz, one of the fathers of the ethnography of communication. However, apparently he only introduced the different contributions of a collective paper on "The Pragmatics of Urban Language" (I admit I missed that one).

A number of excellent papers were given by researchers in conversation analysis. John Heritage from the Sociology Department of UCLA argued that "Oh-prefaced responses to inquiry" typically represent a commentary on the inappropriateness of the question. He gave good examples of such answers to a well-known type of dumb journalist's questions.

In the same research tradition I found particularly noteworthy papers trying to systematically treat with the pragmatics of prosody. One of them dealt with "Aspects of prosody in question-answer sequences in German conversations". The linguist Margret Selting showed how prosodic features such as loudness, pitch and elongation do not only signal problematic expressions or meaning problems, but also topic shift, topic focussing and focussing on an underlying assumption.

The actual topic of the conference, namely the **interdependence** of cognitive and social aspects of language use, was very rarely addressed (anyway not in the papers I went to). This was also noted at the concluding roundtable, which took up the conference topic.

Among the whole crowd there were only three SIL people: Barbara Sayers from the Australian Aborigines Branch, Regina Blass from the Burkina Faso-Niger Branch, and myself from the Côte d'Ivoire-Mali Branch. I think each of us had an interesting contribution to give and was able to make valuable contacts during the conference. I was very happy I could participate but I was a bit disappointed that some well-known people who had been announced were not able to come (B.Comrie, E.Schegloff, S.Thompson, to name a few). ■

Reviews of Books

Observing and Analysing Natural Language: a critical account of sociolinguistic method. By Lesley Milroy. 1987. (Language in society 12). Oxford: Basil Blackwell Ltd. xiv, 213 pp. £9.95 Pb.

Reviewed by J. STEPHEN QUAKENBUSH

Summer Institute of Linguistics–Philippines

1. INTRODUCTORY

1.1 What the book is about

This book is about linguistic field methods, about the collection and analysis of linguistic data. It is written from the perspective of a sociolinguist who works within a general research paradigm established by William Labov. Labov's approach analyzes speech data with special reference to its social context and significance. It can be characterized as quantitative, in that it counts actual occurrences of linguistic phenomena in order to make statements about the frequency of use of particular variables over a range of linguistic and social conditions. This perspective differs from a transformational generative framework in that it capitalizes on the patterned **heterogeneity** of language systems within **communities** of people, whereas generative grammarians have almost by definition concentrated on the language of an **ideal speaker/hearer** outside the realm of any particular social context. Because of this emphasis on "the big picture", sociolinguistic theory and methods have much to offer the SIL fieldworker, who also is intimately involved in "observing and analysing natural language".

Although SIL fieldworkers have rarely analyzed language variation in the terms or in the detail presented in this book, we are forced to deal with similar realities on a day-to-day basis. We are foiled in our attempts at writing the "perfect" phonemic statement because people do not all pronounce the same word the same way, or the same person does not always use the same pronunciation. Later, at the translation desk we are forced to make guesses between alternate

forms of words and phrases based on impressions such as "Old people seem to say it this way" or "This construction seems to be a more formal way of saying the same thing". Language is variable, and a good part of sociolinguistic endeavor concentrates on uncovering the patterns to this variation that cannot be explained in terms of linguistic environment alone. This book shows us how many linguists have struggled with real data like ours and have discovered a great deal.

In fairness to the author, it must be stated that this book is not just about field methods. It deals explicitly with the relationship between data collection and analysis on the one hand, and our theoretical perspectives and understanding of the phenomena of language on the other. And it does a good job.

1.2 How good is it?

This work goes beyond the simple recounting of methods employed in particular studies to consider the larger underlying questions. This is its strong point. It does not blindly recommend any particular methodologies, but looks instead for general principles that work to facilitate or hinder the collection and analysis of data. The author is far from narrow in her outlook, being intimately acquainted with a vast amount of fieldwork. To her credit, she clearly states her biases, which favor **quantitative** linguistics as a pursuit, and **participant observation** as a method.

2. SUMMARY

The first four chapters of this work concentrate on methods of data collection, while the second four deal with various aspects of data analysis and interpretation. The final chapter applies sociolinguistic theory and method to such broader concerns as cross–cultural communication problems, and educational philosophies and procedures. The following is a brief summary of the contents of each chapter.

2.1 CHAPTER 1: Field Linguistics: some models and methods

Chapter 1 provides a brief but important historical perspective on linguistic fieldwork, and characterizes types of methods used by linguists of various traditions. Following Kibrik [1977], Milroy discusses three major types of methods: (a) introspective; (b) analytic; and (c) experimental. Although it is impossible to work exclusively within any one of these methods, different "traditions" within linguistics can easily be characterized as relying to a great degree on one or another. Historically, practitioners of transformational generative grammar have relied heavily on introspection, whereas linguists working within the American descriptive tradition have mainly used the analytic method in working with data collected in the field. Social psychologists have tended toward the experimental method in working with language.

Milroy's constant reference to varied studies, particularly in this first chapter, assures the reader that her observations are substantive and supportable. Unfortunately, the corresponding assumed knowledge of the field and acquaintance with its primary actors will make this a difficult chapter for the newcomer to the linguistic world.

2.2 CHAPTER 2: Sampling

Chapter 2 takes Labov's quantitative procedures as a starting point [cf. Labov 1966, 1972a, 1972b, etc] and examines the issue of **representativeness** in language research both in terms of the range of speakers and the range of language used by the same speaker. Most of the discussion here is devoted to the idea of obtaining a representative sample of types of speakers. Under this heading Milroy discusses random sampling, stratified sampling, judgement sampling, and sampling by a social network approach. After stating that strict representativeness is generally not attainable and possibly not even desirable in sociolinguistic research, Milroy concludes that it may be better to rely on a judgement sample "on the basis of specifiable and defensible principles" [p. 28].

Milroy also addresses the important issue of sample size. She notes that because linguistic behavior is apparently more homogeneous than many other types of behavior, linguists have found that very large samples are not necessary. The minimum number of speakers she

recommends for a sociolinguistic survey, however, may come as a surprise to some SIL surveyors. Here she quotes Sankoff:

> The literature, as well as our own experience, would suggest that even for quite complex communities samples of more than about 150 individuals tend to be redundant, bringing increasing data-handling problems with diminishing analytical returns. It is crucial, however, that the sample be well chosen, and representative of all social subsections about which one wishes to generalize. [Sankoff 1980:52].

The main advantage of a social network approach to sampling, which uses pre-existing social groups as the unit of study, is that the researcher is able to obtain much larger amounts of naturally occurring speech. See Milroy [1980] for further explanation and discussion of the theory of social networks, as well as Schooling [forthcoming] to see how this approach has been applied in an SIL context.

In this chapter Milroy only briefly considers the issue of representative speech sampling of individual speakers. She suggests that Labov's original methods for sampling styles in his New York research are still applicable and adaptable, despite various criticisms.

Milroy's discussion of methods in this chapter has obvious applications to SIL survey work, particularly in urban environments or in dealing with large groups. Her comments are also relevant to smaller language groups, however. The language surveyor must always keep this question in mind: "Of what part of the population is what I am seeing or hearing really representative?" This is a good question not only for the language surveyor who is dealing with language attitudes, use, and proficiency, but also for the translator who is making choices among specific linguistic variables at the translation desk.

2.3 CHAPTER 3: Speakers: some issues in data collection

Chapter 3 is concerned with the question of how to obtain good data, primarily in the context of a language interview. Much of the work following Labov has concentrated on analyzing the vernacular, the language variety "adopted by a speaker when he is monitoring his speech style least closely" [Labov 1972b:208]. Understandably, it is not always easy to elicit vernacular speech in an interview setting.

The very nature of an interview works against the possibility of obtaining "unmonitored" speech by aggravating what Labov has termed the "observer's paradox" – we want to observe what unobserved language is like. Milroy makes the more general point that "(t)he kind of approach which is made to a speaker will affect, in a number of specifiable ways, the data available for analysis" [p. 39]. She argues that the participant observation technique can "offset the worst effects of the observer's paradox" [p. 61]. This line of reasoning is of immediate relevance to the SIL fieldworker when collecting data, and is particularly crucial for the surveyor.

2.4 CHAPTER 4: Methodological Principles and Fieldwork Strategy: two case studies

In Chapter 4 Milroy discusses the methodologies employed in two large urban sociolinguistic research projects. These two case studies are of Labov's Philadelphia project on Linguistic Change and Variation (1973–76), and of research by Milroy and others undertaken in Belfast, Northern Ireland (1975–81) concerning language variation and change in that city.

The Philadelphia study employed two complementary methods of data collection: a highly structured 15–minute interview by telephone, and a less structured participant observation type of study in several neighborhoods. The former was for breadth, the latter for depth. As part of the neighborhood study, fieldworkers also asked questions of individuals, but special emphasis was given to question design in order to help the fieldworker control the flow of conversation with minimal actual input. This latter type of "interview" was built around "modules" and "conversational networks" in order "to simulate the seamless topic–shift structure of normal conversation". This procedure shows special ingenuity on the part of the designer and would surely be useful in cross–cultural situations of the type encountered by SIL surveyors where continuous question–asking is inappropriate, incomprehensible, suspicious, or just plain rude. The Philadelphia project also included **rapid and anonymous surveys** of the now–famous "fourth floor" type used by Labov in New York City. The advantage of this type of survey is that a clear view of the distribution of a single variant can be obtained quickly, if the researcher can devise a clever enough "instrument".

The Belfast projects also employed a variety of methods to attain different goals. The two main types were community studies and doorstep surveys. The principle of participant observation was more closely adhered to in the community studies of Belfast than in the corresponding neighborhood studies of Philadelphia, and Milroy discusses in detail the advantages and disadvantages of the method. Researchers in Belfast gained access to the communities they studied through concentrating on social networks. She concludes that Labov's methods were especially suited for an in–depth study of a community "located at various points in the class continuum", but that the Belfast methods "were developed primarily for the study of **close–knit** communities – and indeed it is likely that they are particularly and rather generally suitable for urban or rural communities of this type" [p. 82].

Chapter 4 concludes with a consideration of ethical issues. Milroy strongly advocates (1) preserving the anonymity of speakers, and (2) limiting access to recordings to bona fide scholars engaged in a specific piece of work. She discusses the issue of covert versus overt observation and recording, and makes the following conclusions which are highly relevant to all language researchers:

> (M)uch of what constitutes good ethical practice is highly culture–dependent... [Therefore], we cannot know in advance the belief systems of the communities we are studying; an important part of good fieldwork practice is to get to know them and take them into account at all stages of the research, up to and beyond the time of publication [p. 92].

2.5 CHAPTER 5: Analysing Variable Data: speaker variables

Chapter 5 explores certain "speaker variables" that have been found to be of importance in many sociolinguistic studies; variables such as social class, sex, ethnicity and social network. In other chapters Milroy shows her expertise as a linguist; here she shows an impressive degree of insight into sociological matters as well.

Milroy examines two main competing views of social class: Marxist and functionalist–capitalist–stratificational. She argues that one major problem within sociolinguistic research is the adoption of the latter model without acknowledgement or even awareness of its controversial nature. Social class is an ill–defined concept within

sociology which covers a variety of distinctions in lifestyle, attitude and belief, as well as problems of wealth, power and prestige. She concludes that sociolinguistic research will benefit by making a distinction between **class** and **status**, "for it is the evaluative rather than the economic dimension of stratification which seems to be relevant to linguistic variation" [p. 101].

Milroy argues that the analysis of other variables, such as **sex**, ethnicity, have also been clouded by an uncritical adoption of a stratificationalist view of society. She discusses in detail the concept of **social network** and its use in three very different studies. In dealing with the limitations of the social class variable, Milroy makes the important point that the social network concept

> provides a means of approaching an analysis where the concept of social class is difficult to apply; this is a problem commonly encountered by researchers studying **minority ethnic groups, migrants, rural populations or populations in non-industrialized societies**. [p. 109, emphasis added]

2.6 CHAPTER 6: Analysing Phonological Variation

This chapter provides good background on and rationale for the "linguistic variable". It has less immediate relevance to the SIL fieldworker because the very purpose of the practical orthographies we design is to mask this kind of phonological variation. Milroy states that much of Labov's work assumes that sociolinguistic variables pertain to "single co-extensive phonetic and social dimensions" [p. 118]. She notes that many researchers have criticized this assumption as a simplistic one, and then summarizes convincing evidence for such criticism.

In the final section, Milroy advocates a well-reasoned use of statistical procedures in the quantification of linguistic data. She briefly describes the difference between exploratory and confirmatory statistics, and recommends the former as very suitable for much sociolinguistic research. She cites Butler [1985] as providing "a clear account of the assumptions underlying a number of different [statistical] tests" [p. 137].

2.7 CHAPTER 7: Analysing Syntactic Variation

Chapter 7 examines the methodological and theoretical problems in extending the analysis of variation to the level of syntax, and notes that the same techniques and concepts used for phonological analysis are not always applicable. On the practical level, it is often not possible to obtain sufficient **tokens** of a specific syntactic variable in naturally occurring speech, and thus different elicitation or experimental techniques are called for. Once specific examples are obtained, it is impossible due to complex pragmatic issues to define all the possible environments where a syntactic variable may or may not occur. On a more theoretical level, the notion developed for phonological data that linguistic variants should express the same underlying semantic structure is a much disputed one in the area of syntax.

Milroy discusses several studies in detail, and concludes that there are two different strategies which have been adopted by researchers in syntactic variation: "one is to minimize the significance of possible semantic differences between variants, and the other is to acknowledge and use as a foundation for the analysis of the interrelationships between syntax, semantics and discourse" [p. 164]. She cites Cheshire [1982a, 1982b] and Weiner & Labov [1983] as examples of the first type of strategy, and Lavandera [1975, 1978] and Harris [1984] as examples of the latter.

2.8 CHAPTER 8: Style-shifting and Code-switching

Chapter 8 examines variation in the language of individual speakers under different circumstances. Whether this involves style-shifting within a particular language or code, or the more visible code-switching between clearly distinct languages or dialects, it has been accepted for many years that "the psycho-social kinds of intra-speaker variation are similar" [p. 171]. This chapter focuses on two widely used methodological frameworks: Labov's quantitative paradigm and Hymes' ethnographic approach.

Milroy devotes a great deal of this chapter to arguing that Labov's axiom that "styles can be arranged along a single dimension, measured by the amount of attention paid to speech" [Labov 1972b:208] is too simplistic. The two major difficulties with this

notion are: (1) Labov's implicit assumption in his early work that reading and speaking styles are comparable types of behavior; and (2) the fact that attention paid to speech is apparently not the best basis for explaining patterns of stylistic variation.

With regard to the first difficulty, Milroy gives evidence from the Belfast research and elsewhere that reading pronunciations seem to be influenced by graphic representation (among other things), and that, contrary to Labov's New York City research, reading lists of isolated words does not always seem to require more attention paid to speech than reading connected passages. With regard to the second difficulty, Milroy, following Bell, argues that **attention paid to speech** is not as applicable or as explanatory as **audience design** for interpreting patterns of stylistic variation. Bell's fundamental point is that "at all levels of language variability, people are responding primarily to other people. Speakers are designing their style for their audience" [Bell 1984:197]. Two of several important factors supporting the audience design approach are that: (1) this type of explanation is easily brought into line with research on code-switching, which repeatedly shows identity of addressee to be a crucial variable; and (2) there is much evidence that vernacular forms can be used in highly monitored situations.

Milroy recognizes two "traditions" in the study of code-switching and code-mixing. One, represented by Lavandera [1978] and Gumperz [1982], seeks "to explain the motive underlying code-switching by examining the use made by speakers for rhetorical purposes of available linguistic resources". The second, represented by Poplack [1980], seeks to specify "the linguistic (as opposed to situational) constraints on patterns of code-mixing, often with a view to contributing to current theoretical work on language universals" [p. 184].

Due to the more conscious nature of code-switching, the observer's paradox operates even more strongly to the disadvantage of the researcher. Several self-report methods have been employed to overcome the observer effect, including questionnaires and the language diary. Milroy is highly skeptical of any self-report data, and rightly so. She claims that

> bilinguals are not usually able to remember which language was used in any particular exchange; it has been suggested that asking them to

> report on incidence of switching is no more effective than asking a monolingual to report on incidence of future tenses (Gumperz 1982:62) [p. 187].

While this may be the case for certain types of switching or mixing, Milroy is probably overstating her case here. Gonzalez and Bautista, at least, in their 1986 *Language surveys in the Philippines*, came to a different conclusion, drawing a distinction between the reliability of self-report data for language use as opposed to language proficiency. In an analysis of 30 language surveys undertaken in the Philippines between 1966 and 1984, these linguists found that "in general, self-reports on language use appear to be valid and reliable" [Gonzalez and Bautista 1986:25]. While it is always wise to check self-report data against performance data, it does not follow that self-report data on code-switching or code-mixing is completely without merit.

2.9 CHAPTER 9: Sociolinguistics: some practical applications

In Chapter 9 Milroy deals with the impact sociolinguistic research has made in three areas: interactional sociolinguistics, the educational system, and formal language assessment. She begins by noting that the popular conception of language as naturally pure and homogeneous, but corrupted by deviations, is one that is influential even among professionals whose decisions concerning language affect the lives of many people. There is much room then for sociolinguistics to be applied in the social and political arena.

The main interest of interactional sociolinguistics, as developed over the last ten years by Gumperz, has been in the field of cross-cultural communication. His research has focused chiefly on "communication problems in various 'gatekeeping' contexts which are of critical importance to those who ... are attempting to gain access to goods, services and opportunities..." [p. 201].

Sociolinguists have made an impact in the educational systems of both the U.S. and the U.K., as the notion that the language of non-standard speakers should be recognized as legitimate has come under much debate. The "Black English Trial" of 1979 pointed out that Black children were routinely diagnosed as having language and auditory perception problems due to the fact that assessment methods did not take into account characteristics of the Black English

phonological system. Cheshire's [1982b, 1984] research has suggested that standard English cannot be taught efficiently "unless the teacher has a clear understanding of the small but systematic differences between standard English norms and local dialect norms" [p. 202].

Sociolinguists have made a noticeable impact in the area of formal language assessment, particularly since Labov's influential "The Logic of Nonstandard English" [Labov 1972a:201–240]. Several researchers have since pointed out that the use of questions that are not genuine requests for information results in an unnatural style of communication for children from many backgrounds. Milroy reiterates that sociolinguists have a great deal to communicate to academics about the realities of societal patterns of language use, and cites **semilingualism** as an example of an "unsatisfactory theory" characterized by "conceptual confusions concerning the nature of societal bilingualism" [p. 211]. On this point, however, Milroy does not elaborate, and thus does not substantiate her attack on the work of educational psychologists such as Cummins [1983] and Skutnabb–Kangas [1983].

CONCLUSION

Milroy does not define sociolinguistics in opposition to "theoretical" or "formal" linguistics. This is as it should be. Conspicuous by their absence are attacks or arguments directed against the transformational generative tradition of linguistic research. This is a relief, and in itself a mark of the coming of age of sociolinguistics. Realizing the legitimacy and importance of common traditions in dialectology, anthropology, sociology, and language research in general, sociolinguists such as Milroy profitably investigate "natural language".

Milroy is eminently qualified to write a textbook such as this because of her extensive personal involvement in sociolinguistic research, her more than passing acquaintance with sociological issues, and her impressive abilities as phonetician, phonologist, and participant observer. The whole concept of patterned variation in language which she portrays in this book is a valuable one for the SIL fieldworker. A great deal of our linguistic training prepares us to deal with **idealized, static homogeneity**. But language in the real world is neither ideal, nor static, nor homogeneous. Beginning

fieldworkers out of necessity settle on some sort of abstract ideal for initial phonemic analysis, but it should be clear to us that this is what we are doing. It may even reduce our level of frustration as we attempt to force neat, categorical rules onto the data if we realize that it is normal for speakers not to pronounce the same word in the same way at all times. Although few of us will have the luxury of being able to spend the time required for this sort of in-depth analysis of variation, it is of utmost importance in the long run to have some notion of the linguistic variables operative in the languages in which we work, and of the social evaluation attached to these variables. Ignoring such matters will greatly diminish the naturalness and the acceptability of any materials we produce.

Milroy's *Analysing and Observing Natural Language* can help us attain a perspective we need, and open our eyes to whole new ways of investigating that beautiful, chaotic, yet systematic puzzle that we call language.

REFERENCES

Bell, A. 1984. Language style as audience design. Language in Society 13:2. 145–204.

Butler, C. 1985. Statistics in linguistics. Oxford: Basil Blackwell.

Cheshire, J. 1982a. Variation in an English dialect: a sociolinguistic study. Cambridge: Cambridge University Press.

Cheshire, J. 1982b. Dialect features and linguistic conflict in schools. Educational Review 34:1. 53–67.

Cheshire, J. 1984. Indigenous non-standard varieties and education. Applied Sociolinguistics, ed. by P. Trudgill, 546–58. London: Academic Press.

Cummins, J. 1983. Bilingualism and social education: issues in assessment and pedagogy. Clevedon, Avon: Multilingual Matters.

Gonzalez, A. and M.L. Bautista. 1986. Language surveys in the Philippines (1966–1984). Manila: De La Salle University Press.

Gumperz, J.J. 1982. Discourse strategies. Cambridge: Cambridge University Press.

Harris, J. 1984. Syntactic variation and dialect divergence. Journal of Linguistics 20:2. 303–27.

Kibrik, A.E. 1977. The methodology of field investigations in linguistics. Janua Linguarum, Series Minor. The Hague: Mouton.

Labov, William. 1966. The social stratification of English in New York City. Washington, DC: Center for Applied Linguistics.

Labov, W. 1972a. Language in the inner city. Philadelphia: University of Pennsylvania Press.

Labov, W. 1972b. Sociolinguistic patterns. Philadelphia: Pennsylvania University Press.

Lavandera, B. 1975. Linguistic structure and sociolinguistic conditioning in the use of verbal endings in *Si* clauses (Buenos Aires Spanish). Unpublished Ph.D. dissertation, University of Pennsylvania.

Lavandera, B. 1978. Where does the sociolinguistic variable stop? Language in Society 7. 171–82.

Milroy, L. 1980. Language and social networks. Oxford: Basil Blackwell.

Poplack, S. 1980. Sometimes I'll start a sentence in Spanish *y termino en Espanol*: towards a typology of codeswitching. Linguistics 18. 561–618.

Sankoff, G. 1980. The social life of language. Philadelphia: University of Pennsylvania Press.

Schooling, Stephen. Forthcoming. Language maintenance in Melanesia; sociolinguistics and social networks in New Caledonia. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.

Skutnabb-Kangas, T. 1983. Bilingualism or not: the education of minorities. Clevedon, Avon: Multilingual Matters.

Weiner, E.J. and Labov, W. 1983. Constraints on the agentless passive. Journal of Linguistics 19. 29–58. ■

Natural Language Processing in the 1980's: A Bibliography. CSLI Lecture Notes, Number 12. By Gerald Gazdar, Alex Franz, and Karen Osborne. 1988. Stanford, CA: Center for the Study of Language and Information. Pp.vii, 240. $29.95 (cloth), $11.95 (paper).

Reviewed by MICHAEL MAXWELL

Perhaps the best thing to be said about this book is that you shouldn't buy it! That is not to say it is not a useful book, on the contrary. But there is a better way to get this information than by buying the book. More on that later.

As the title suggests, the first half of the book is a list (alphabetized by first author) of the bibliographic entries of over 1700 papers and books on "natural language processing (NLP) and computational linguistics" published between 1980 and about the first half of 1987.

A few papers which first appeared before 1980 are also included by virtue of having been reprinted since then.

The second half of the book is a KWIC (Key Word in Context) index of the major words of the titles (excluding such words as "natural" and "language", which would have made it unwieldy). The editors wisely caution the readers that the usefulness of such an index is limited: one can't rely of finding all of the articles dealing with say, ATNs by looking for all of the articles whose titles contain the word "ATN". Following this index, there is an index of the non–primary authors.

The bibliography covers all papers published in journals such as *Computational Linguistics* and such conference proceedings as COLING (Conference on Computational Linguistics) and TINLAP (Theoretical Issues in Natural Language Processing); as well as all papers having to do with NLP found in journals such as *Artificial Intelligence* and in conference proceedings such as AAAI (American Association for Artificial Intelligence) and IJCAI (International Joint Conference on Artificial Intelligence); and finally various papers and books on NLP which have appeared elsewhere. As a rough guideline for whether the article was to be included, the editors used the criterion "Would the editor of Computational Linguistics consider this paper a relevant submission to the journal?"

What has been excluded are articles of a popular nature and papers which pertain strictly to linguistics or strictly to computers (with the exception of some articles in publications which are indexed in their entirety). Also excluded are papers on "concordance creation, lexicostatistics, author identification [how many authors did the book of Isaiah have?] and the like". By these criteria, most of the articles in Notes on Computing would not be included, and indeed I could find no references to that journal. Within the limits, I could find no obvious omissions.

The audience, then, is not the everyday working linguist, but rather those who are developing software for doing phonological or grammatical analysis (or making wish lists for those who are doing such software!).

Assuming you belong to the intended audience, why do I say you shouldn't purchase this book? Because there are better ways to get

the information! A book of this sort is out of date before it appears (the citations run through mid 1987, while the book didn't appear until mid 1988). Foreseeing this problem, the editors have arranged two ways to access the information. First, if you are on a computer network, you can send an E-mail message to **clbib@russel.stanford.edu** "with the single word **help** in the 'Subject:' field in order to receive instructions on searching the bibliography automatically by mail." Second, for those not on a network, for $16 you can order a copy of the updated REFER source file (from which the book was made) on 360k DS/DD MS-DOS floppy disks from:

Ms. Sheila Lee (CLBIB)
School for Cognitive Sciences
University of Sussex
Brighton BN1 9QN
UK

(REFER is a UNIX program which uses a portable database format similar to Standard Format Markers.)

Either of these ways of accessing the bibliographic database has the advantage that the information is being constantly updated. The book is being updated as well, say the editors, but presumably not as often as the database.

So now you know why not to buy this book: buy the floppy instead! And if your field is computational linguistics, you cannot afford to be without it.

Now let me take off my reviewer's hat and put on my agitator's hat. It is high time that a general bibliography of linguistic articles be made available in a computer readable format! How many times have you been asked a linguistic (or translation) question and spent the next six hours trying to find an article you read last month on that very topic? If you live in the US, there are on-line bibliographic services you can call up which cover every article in linguistics for the last hundred years, complete with abstract – for a price. But if you are on the field, that's probably impossible, or so expensive that you wouldn't do it in most cases. What we on the field desperately need is a *simple* computer index of major journals, conference proceedings, and books, updated by floppy every few months and distributed like JAARS software. (I'd bet there's a fair market for such a product among non-SIL linguists, too.) The database could

be searched by author, title, or by key word in a special field of each record. Furthermore, SIL is in a unique position to provide such a service at low cost. Now that's what I'd call Linguistics in the 1980's! ■

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Introducing *Align*, a New Program for Charting Texts

from Ron Moe

Bev Cope has written a new program designed to aid the linguist in charting texts. It takes as input a text in standard format and from it produces a chart of the text with adjusted columns. The linguist decides how many columns are needed, breaks the text into lines and breaks each line into constituent parts. Each constituent is preceded by a backslash code to tell the program which column to put it in. The program then determines the width of each column, draws lines between the columns and sentences, and puts each constituent in the proper column. The following input file produces the chart below.

```
\nu No
\co Conj
\p1 PrepP
\su Subj
\vb Verb
\p2 PrepP
\ob Obj
\nu 1
\su Bev Cope
\vb has written
\ob a new program designed to aid the linguist in the charting of texts.
\nu 2a
\su It
\vb takes
\p2 as input
\ob a text in standard format
\nu 2b
\co and
\p1 from it
\vb produces
\ob a chart of the text with adjusted columns.
```

No	Conj	PrepP	Subj	Verb	PrepP	Obj
1		.	Bev Cope	has written		a new program designed to aid the linguist in the charting of texts.
2a			It	takes	as input	a text in standard format
2b	and	from it		produces		a chart of the text with adjusted columns.

A trial edition of the program, including documentation, is available from: Bev Cope; 7500 W. Camp Wisdom Rd.; Dallas, Texas 75236. ■

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